# WM-GX680/GX688

# SERVICE MANUAL

**Ver 1.2 2002. 01**

*US Model*
*AEP Model*
*WM-GX680*
*E Model*
*Tourist Model*
*WM-GX688*
*Chinese Model*
*WM-GX680/GX688*

Photo: WM-GX688

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| | |
|---|---|
| Model Name Using Similar Mechanism | WM-GX677 |
| Tape Transport Mechanism Type | MF-WMGX670-162 |

## SPECIFICATIONS

### Radio section

**Frequency range**
FM : 76.0 ~ 90.0 MHz (Tourist Model)
: 87.5 ~ 108 MHz (Other Models)
AM : 531 ~ 1710 kHz (Tourist, US Models)
: 531 ~ 1 602 kHz (Other Models)

### Tape section

**Frequency response**
**(Dolby NR off)**
Playback: 40 - 15 000 Hz
Recording/playback: 100 - 8 000 Hz
**Output**
Headphones (🎧REMOTE) jack
Load impedance 8 - 300 Ω
**Input**
Microphone (MIC) jack

### General

**Power requirements**
1.5 V
Rechargeable battery
One R6 (size AA) battery

**Dimensions (w/h/d)**
Approx. 108.4 × 77.7 × 23.0 mm
(4⅜ × 3⅛ × 29/32 inches)
**Mass**
Approx. 148 g (5.3 oz)
**Supplied accessories**
Battery case (1)
Stereo headphones or earphones with remote control (1)
Battery charger (1)
AC plug adaptor (1) (Saudi Arabian, Tourist model)
Rechargeable battery (NC-6WM, 1.2 V, 600 mAh, Ni-Cd) (1)
Rechargeable battery carrying case (1)
Carrying pouch (1)
Stereo microphone (1)

Design and specifications are subject to change without notice.

## RADIO CASSETTE-CORDER

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2002A1600-1
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**Sony Corporation**
**Personal Audio Company**
**Published by Sony Engineering Corporation**

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**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

**Notes on chip component replacement**

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

**Flexible Circuit Board Repairing**

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

# SECTION 1
# SERVICE NOTE

## [Service Mode]

The service mode enables to operate the mechanism of WM-GX680/688 while the MAIN board is opened.

Rotation of the idler gear (A) (S side) is detected using the photo-reflector (PH1) in the WM-GX680/688. PH1 is located on the MAIN board, therefore the rotation of the idler gear (A) (S side) cannot be detected by PH1 when the MAIN board is removed. As a result, the motor cannot be controlled and cannot run correctly.

To repair the machine after the MAIN board is removed while the main power is turned on, follow the procedures as described below.

### 1. Setting

1) Remove the cabinets referring to section "3. DISASSEMBLY". Open the MAIN board.
2) Connect the motor (M601) and the plunger solenoid (PM901) to the MAIN board using the jumper wires. When the extension jig (1-769-143-11) (10 wires as a set) is used, they can be connected easily.
3) Short the TAPE DETECT switch (S901-2), R TUME switch (S901-1), F TUME switch (S902-1) and ATS switch (S902-2).
4) Connect an AF oscillator to resistor (R43).
5) Connect DC 1.3 V from external regulated power supply to ⊕ and ⊖ terminals of the battery.

### 2. PRE-SET status

The PLAY, FF and REW modes can be entered only from the PRE-SET status.

1) Check that the slider (NR) is in the center position (S1), and the FWD/REV switch is also in the center position. When these switches are not in the center position, set them to the PRE-SET status as follows.
2) Move the FWD/REV switch (S1) to the same position as the slider (NR) is set.
3) The slider (NR) can be moved when the main power of the regulated power supply is turned OFF once then back ON. Move the FWD/REV switch (S1) to the center position in synchronism with the timing when the slider (NR) is moved.

### 3. FF, REW modes

1) Check that the PRE-SET status is set.
2) Connect square wave or sine wave to resistor (R43). (See illustration below.)
3) Press the [■] switch (S3) to enter the STOP mode.
4) Press the [FF PRESET+] switch (S4) and the [REW PRESET–] switch (S5).

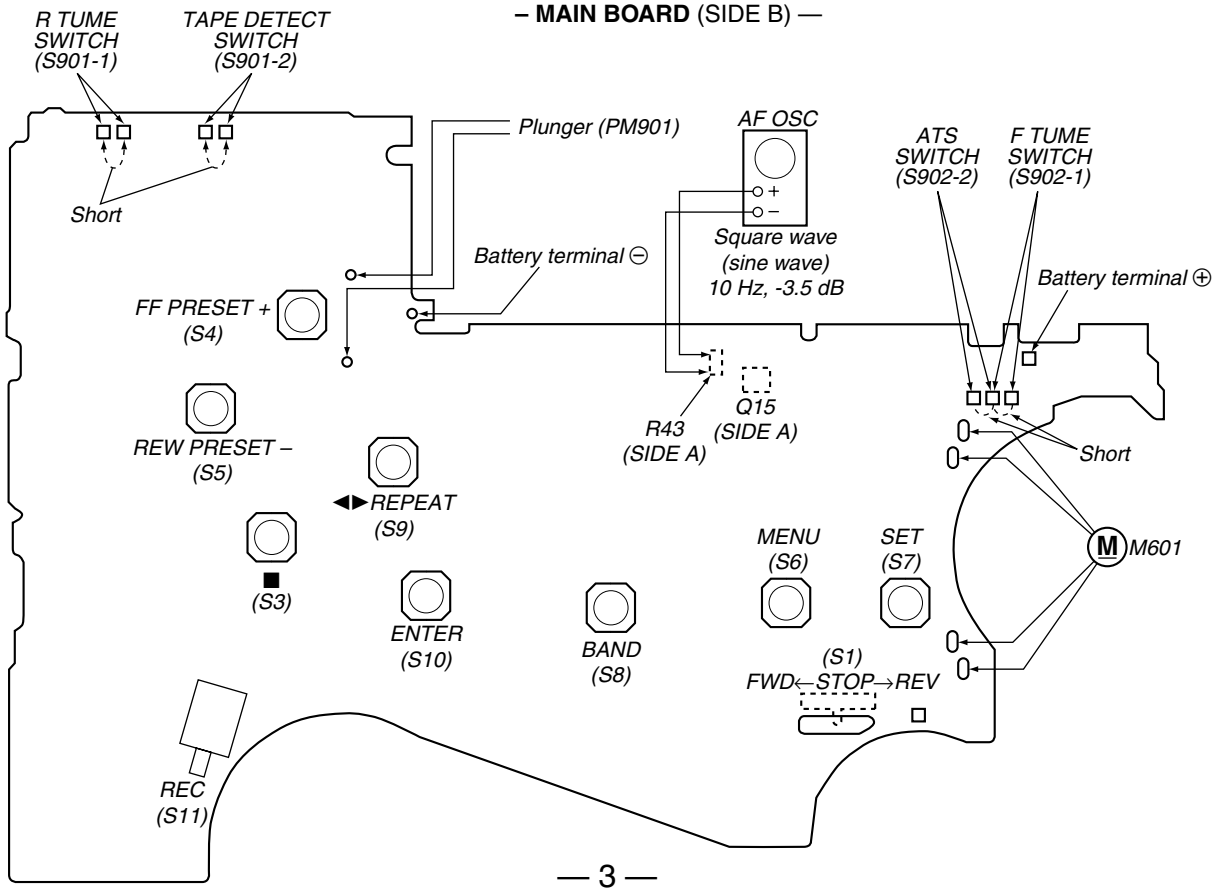
### 4. PLAY mode

1) Check that the PRE-SET status is set.
2) Connect square wave or sine wave to resistor (R43). (See illustration below.)
3) Press the [■] switch (S3) to enter the STOP mode.
4) When the [◄►REPEAT] switch (S9) of the MAIN board is pressed, the slider (NR) moves once to the F side then moves to the R side. When the FWD/REV switch (S1) is pressed in the synchronism with the above timing, the machine can enter the PLAY (R side) mode. Press the [◄►REPEAT] switch (S9) again, and move the FWD/REV switch (S1) in the synchronism with the motion of slider (NR). It enables the machine to enter into the PLAY (F side) mode.

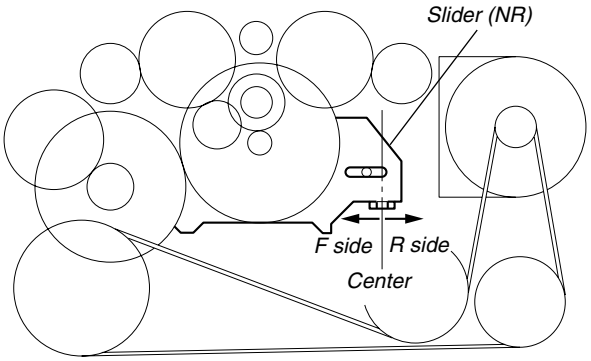
**Note 1**: When you fail to enter the PLAY mode, re-start from step 1) PRE-SET status.

**Note 2**: Regarding the [◄►REPEAT] (S9), [■] (S3), [FF PRESET+] (S4), and [REW PRESET–] (S5) switches, use these switches of the remote control unit as much as possible.

**Note 3**: If a headphones are used, the beep sound shows the timing of the FWD/REV switch (S1).

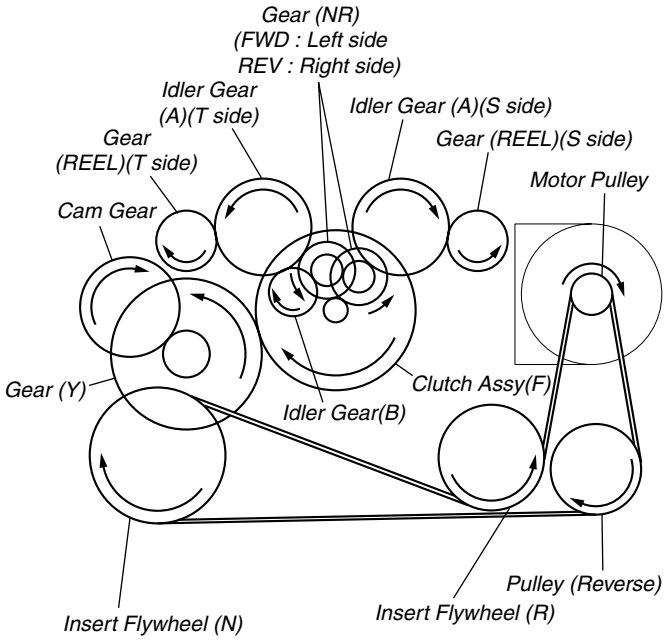


**[ Slider (NR) ]**

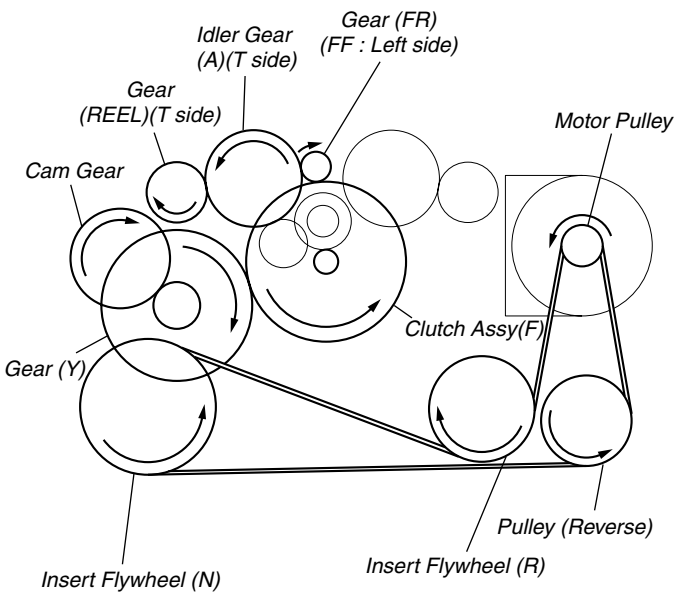



**[ Tape drive mechanism ]**

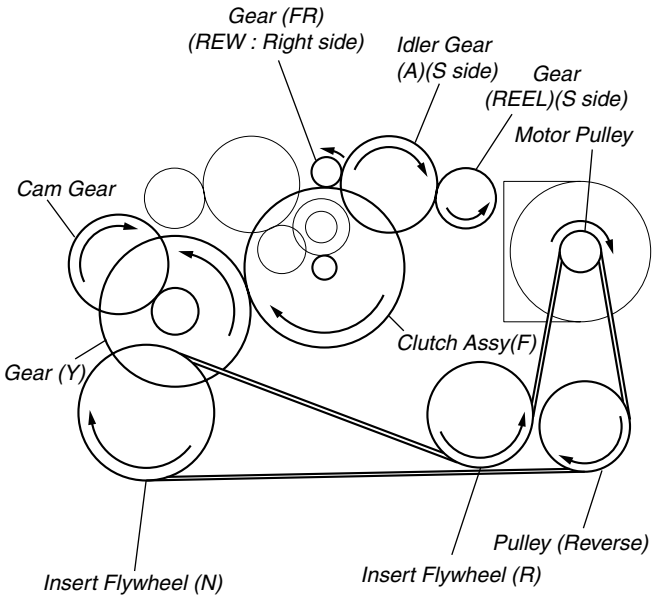
Tape drive mechanism in PLAY mode




Tape drive mechanism in FF mode



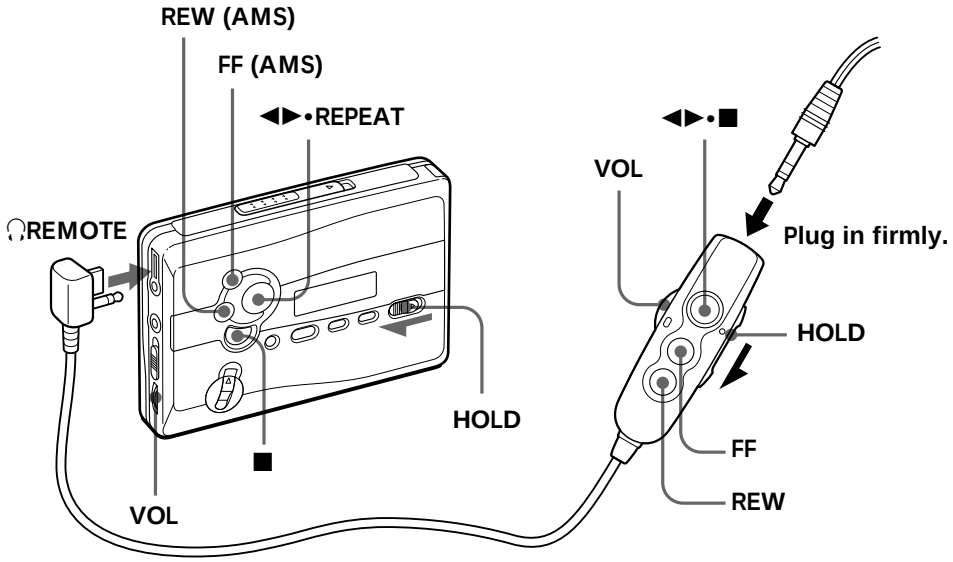

Tape drive mechanism in REW mode

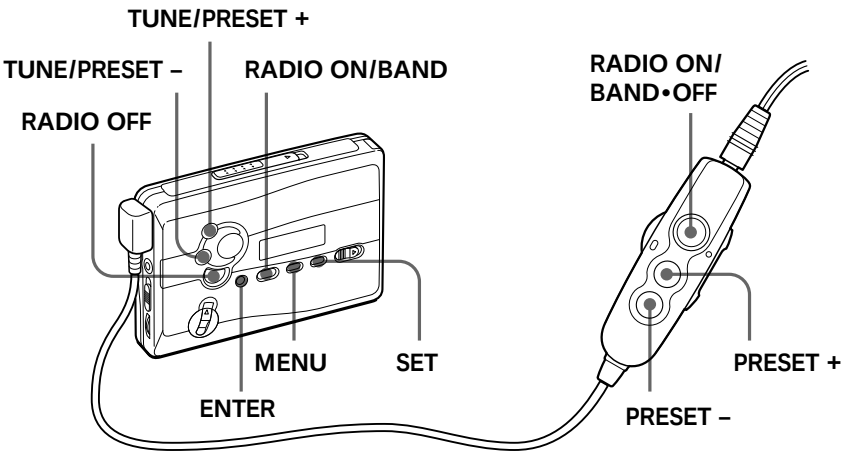


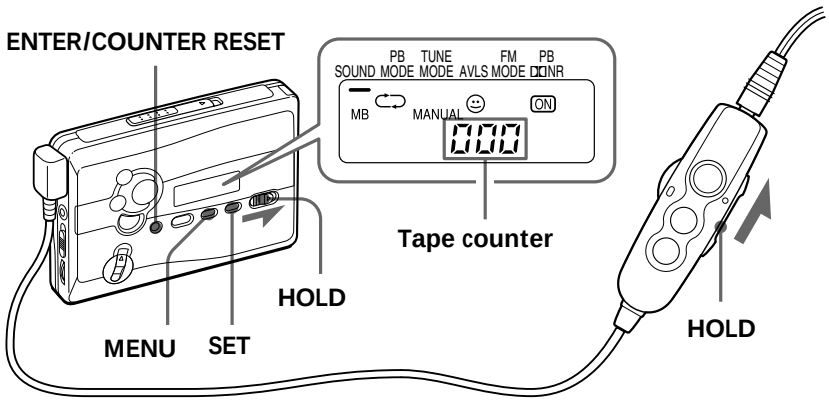
# SECTION 2
# GENERAL

This section is extracted from instruction manual.

- **LOCATION OF CONTROLS**

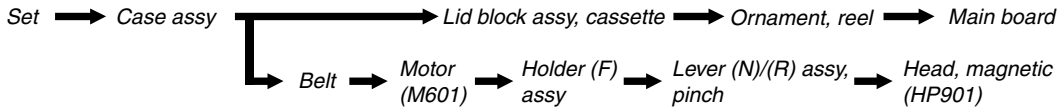


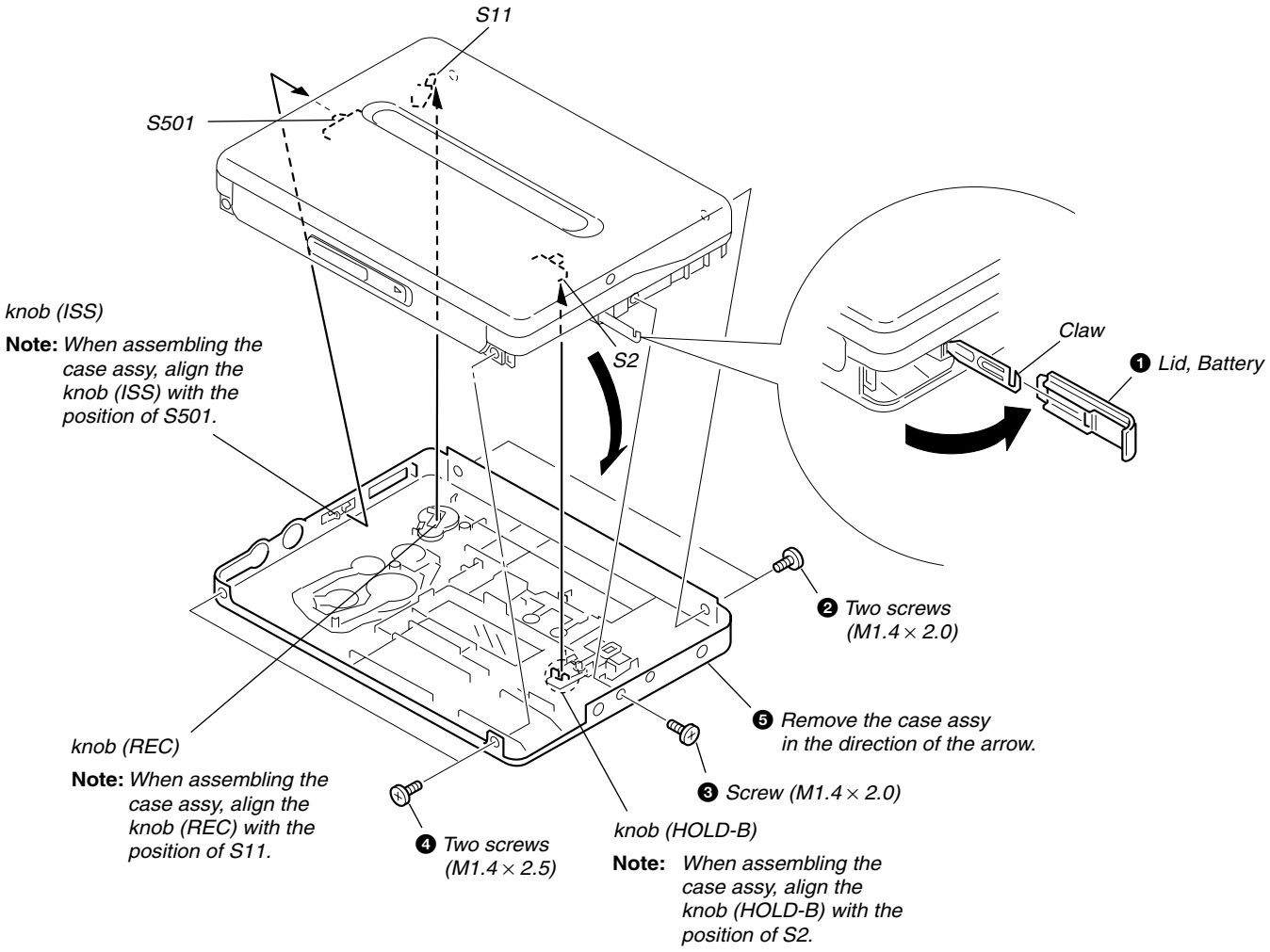
# SECTION 3
# DISASSEMBLY

**Note :** Disassemble the unit in the order as shown below.

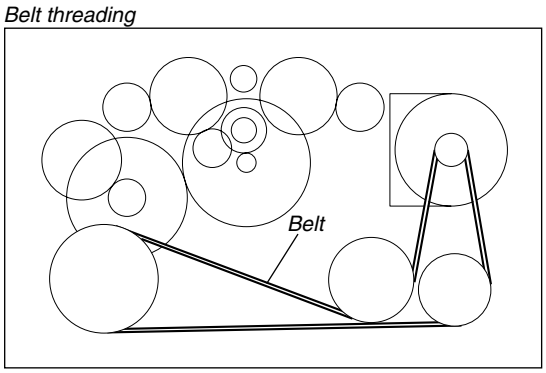


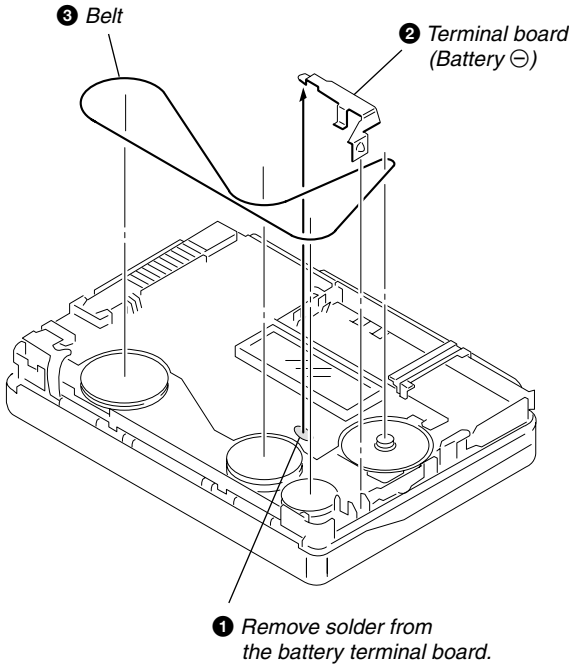

**Note :** Follow the disassembly procedure in the numerical order given.

## 3-1. CASE ASSY

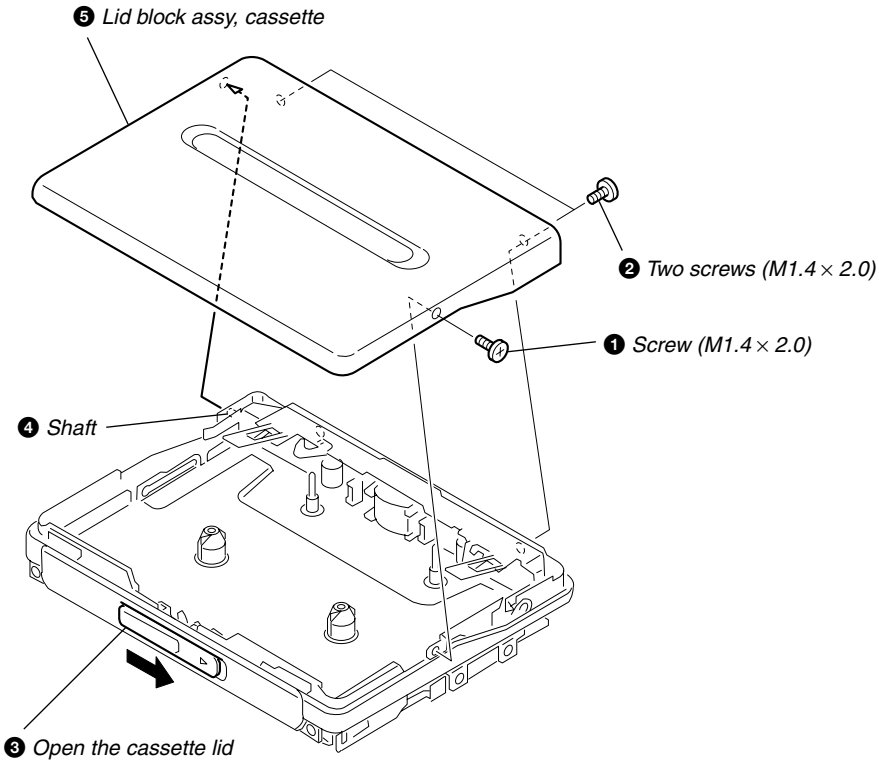

S11
S501
S2
knob (ISS)
Note: When assembling the case assy, align the knob (ISS) with the position of S501.
Claw
❶ Lid, Battery
❷ Two screws (M1.4 × 2.0)
❺ Remove the case assy in the direction of the arrow.
knob (REC)
Note: When assembling the case assy, align the knob (REC) with the position of S11.
❸ Screw (M1.4 × 2.0)
❹ Two screws (M1.4 × 2.5)
knob (HOLD-B)
Note: When assembling the case assy, align the knob (HOLD-B) with the position of S2.

### 3-2. BELT

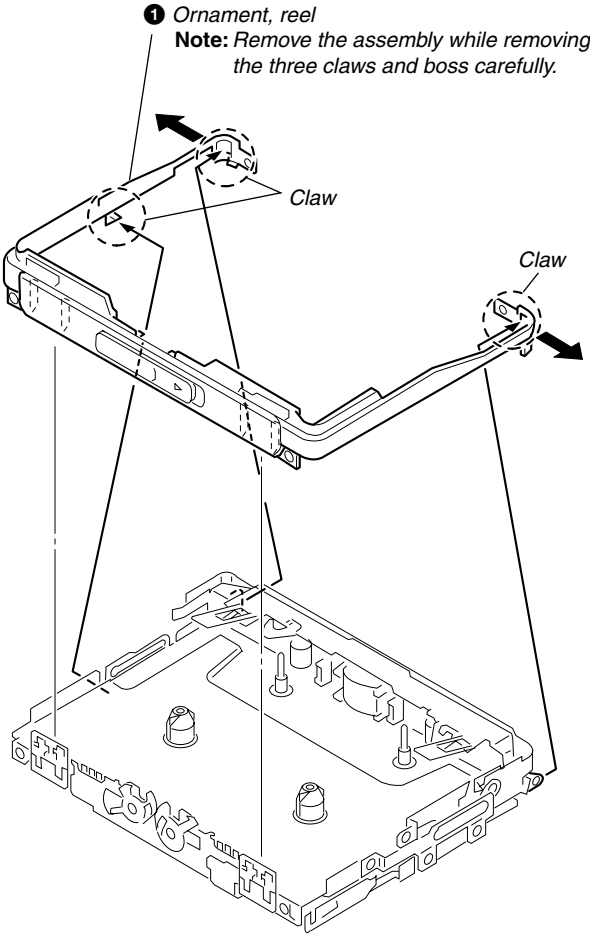


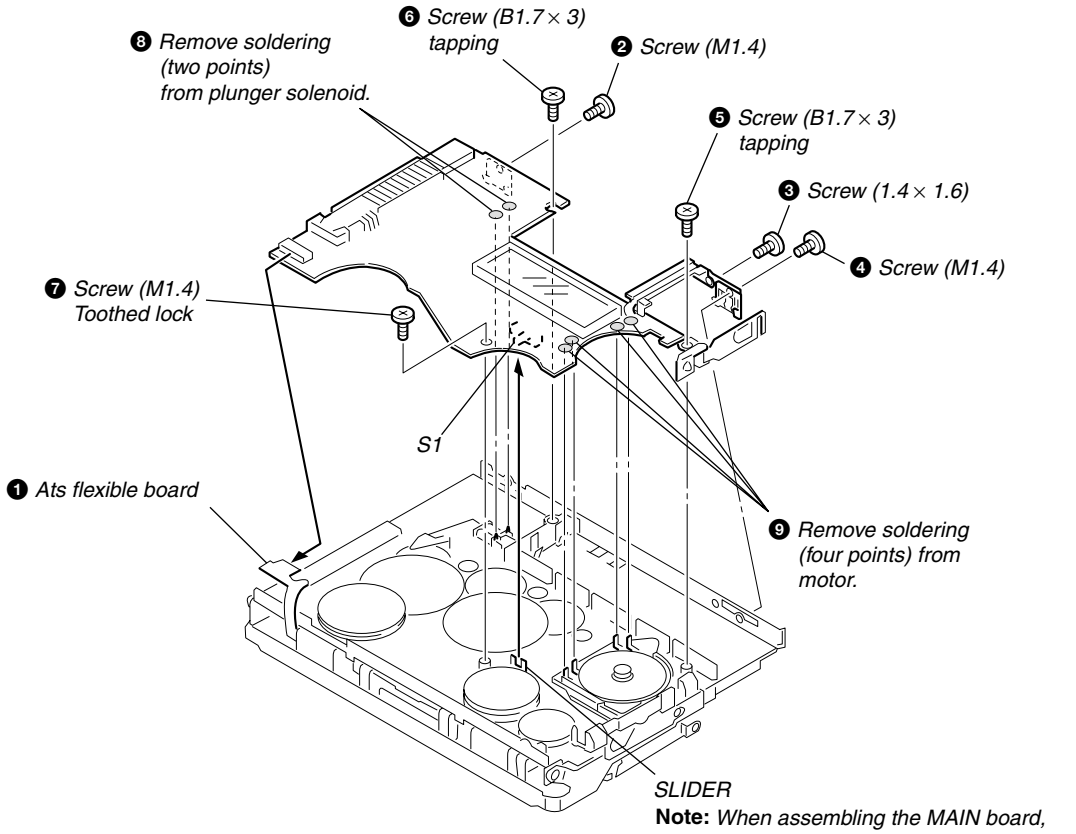

### 3-3. LID BLOCK ASSY, CASSETTE



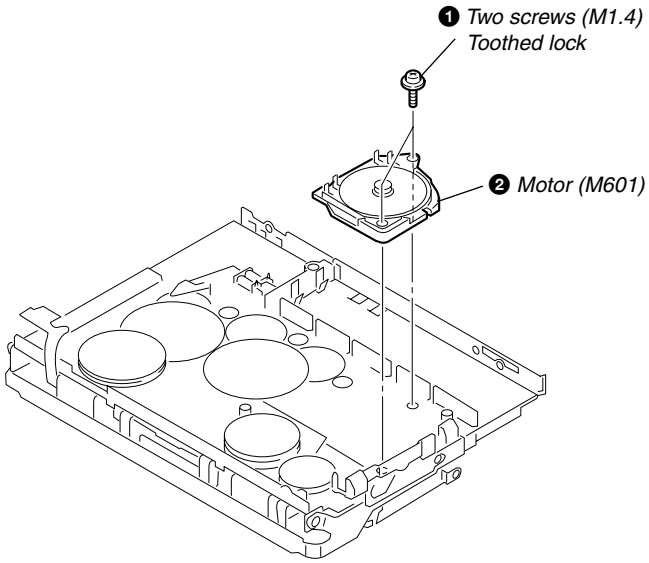
### 3-4. ORNAMENT, REEL



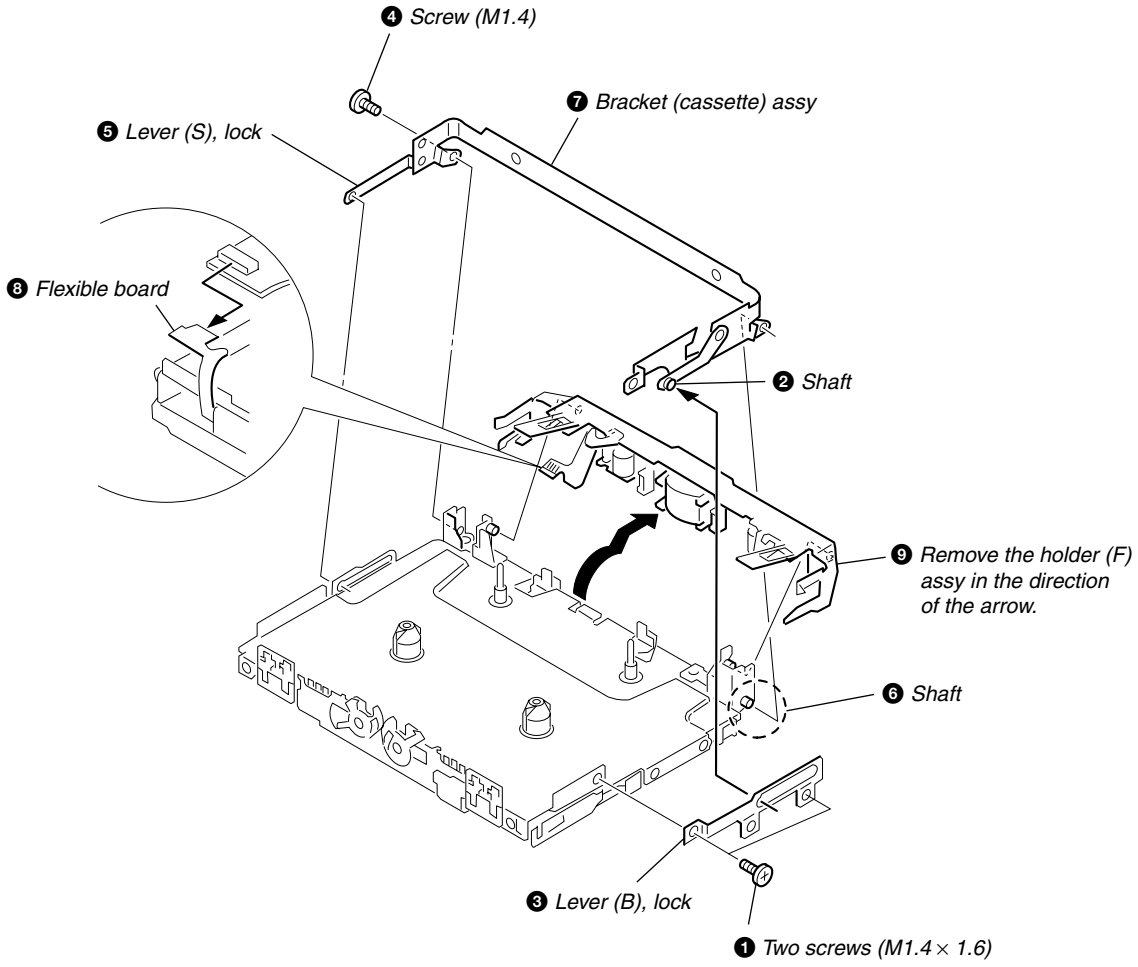

### 3-5. MAIN BOARD


❻ Screw (B1.7 × 3) tapping
❽ Remove soldering (two points) from plunger solenoid.
❷ Screw (M1.4)
❺ Screw (B1.7 × 3) tapping
❸ Screw (1.4 × 1.6)
❹ Screw (M1.4)
❼ Screw (M1.4) Toothed lock
S1
❶ Ats flexible board
❾ Remove soldering (four points) from motor.
SLIDER
Note: When assembling the MAIN board, align the slider with the position of S1.

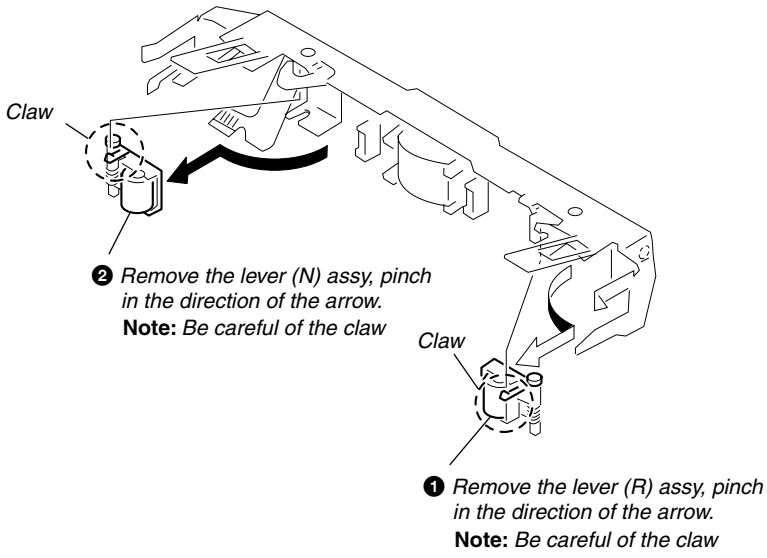
### 3-6. MOTOR (M601)



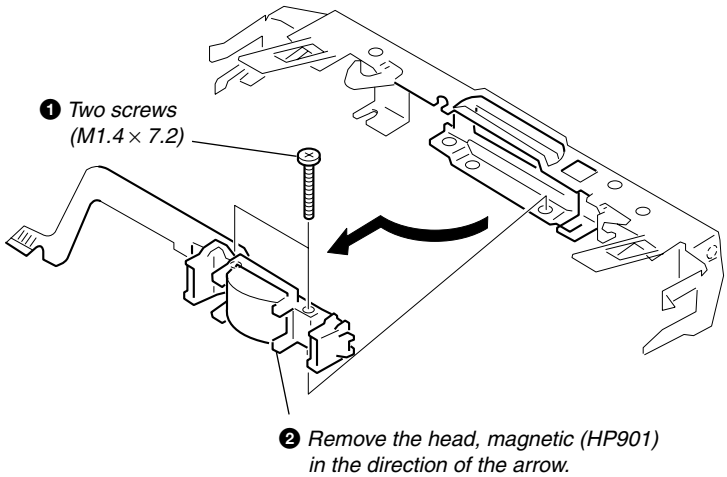

### 3-7. HOLDER (F) ASSY


❹ Screw (M1.4)
❼ Bracket (cassette) assy
❺ Lever (S), lock
❽ Flexible board
❷ Shaft
❾ Remove the holder (F) assy in the direction of the arrow.
❻ Shaft
❸ Lever (B), lock
❶ Two screws (M1.4 × 1.6)

### 3-8. LEVER (N) / (R) ASSY, PINCH


Claw
❷ Remove the lever (N) assy, pinch in the direction of the arrow.
Note: Be careful of the claw
Claw
❶ Remove the lever (R) assy, pinch in the direction of the arrow.
Note: Be careful of the claw

### 3-9. HEAD, MAGNETIC (HP901)



# SECTION 4
# MECHANICAL ADJUSTMENT

### PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback/erase head  pinch roller
   rubber belts  capstan
2. Demagnetize the record/playback/erase head with a head demagnetizer. (Do not bring a head demagnetizer close to the erase head.)
3. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

**• Torque Measurement**

| Mode | Torque Meter | Meter Reading |
|---|---|---|
| FWD | CQ-102C | 1.47 to 2.45 mN•m (15 to 25 g•cm) (0.21 to 0.34 oz•inch) |
| FWD Back Tension | CQ-102C | Less than 0.20 mN•m (Less than 2.0g•cm) (Less than 0.028 oz•inch) |
| REV | CQ-102RC | 1.47 to 2.45 mN•m (15 to 25 g•cm) (0.21 to 0.34 oz•inch) |
| REV Back Tension | CQ-102RC | Less than 0.20 mN•m (Less than 2.0g•cm) (Less than 0.028 oz•inch) |
| FF, REW | CQ-201B | More than 4.90 mN•m (More than 50 g•cm) (More than 0.69 oz•inch) |

# SECTION 5
# ELECTRICAL ADJUSTMENT

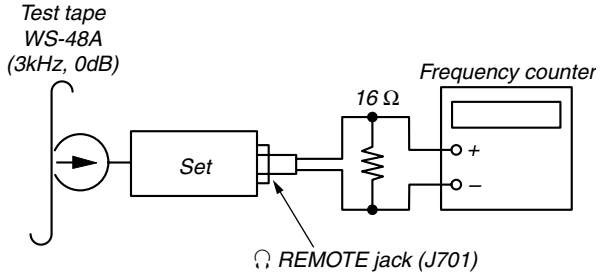
### PRECAUTION

1. Specified voltage : 1.3 V (DC)
2. Switch and control position
   MENU switch
   HOLD : OFF
   VOL : MAX
   ISS : 1

## TAPE SECTION

| Tape | Signal | Used for |
|---|---|---|
| WS-48A | 3 kHz, 0 dB | Tape Speed Adjustment |

**Tape Speed Adjustment**
**Procedure:**



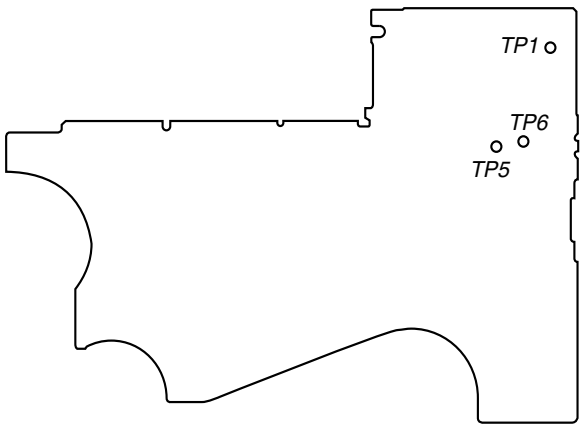

1. Enter the FWD playback mode.
2. Adjust RV601 so that the value of the frequency counter reading becomes 3,000 Hz.
   Specification value:

| Frequency counter |
|---|
| 2,940 Hz – 3,060 Hz |

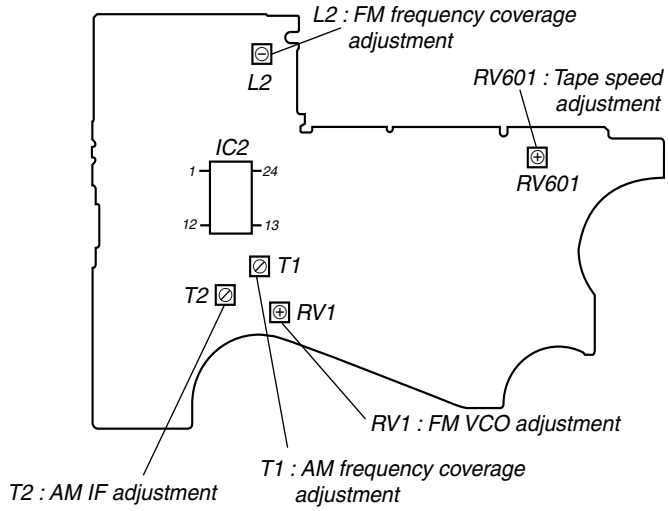
3. Check that the frequency deviation at the beginning and ending of a tape is within 1.5 % (45 Hz).

**Adjustment Parts Location :**

**[MAIN BOARD]** — SIDE A —



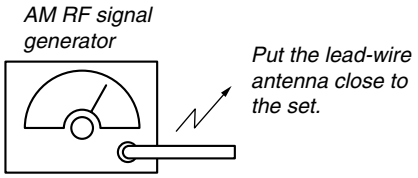

**[MAIN BOARD]** — SIDE B —



## TUNER SECTION

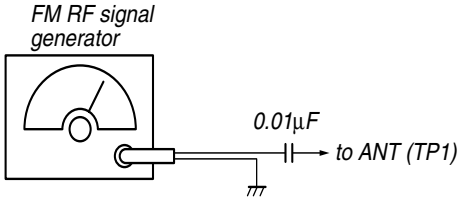
**0dB=1µV**

[AM]
BAND switch : AM

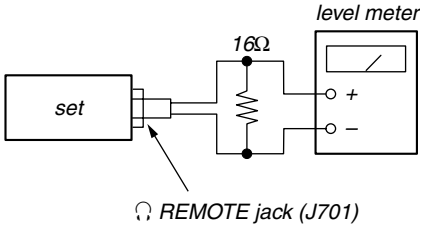



*30% amplitude modulation by 400Hz signal.*
*Output level : as low as possible*

[FM]
BAND : FM




*22.5kHz frequency deviation by 400Hz signal.*
*Output level : as low as possible*




• Repeat the procedures in each adjustment several times.

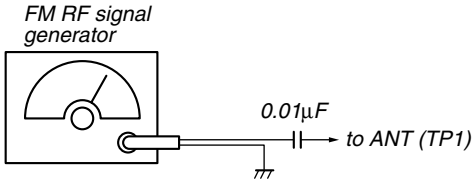
| AM FREQUENCY COVERAGE ADJUSTMENT | |
|---|---|
| Adjust for a maximum reading on level meter. | |
| T1 | 531 kHz |
| Confirmation | 1,710 kHz |

| AM IF ADJUSTMENT | |
|---|---|
| Adjust for a maximum reading on level meter. | |
| T2 | 450 kHz |

| FM FREQUENCY COVERAGE ADJUSTMENT | |
|---|---|
| Adjust for a maximum reading on level meter. | |
| L2 | 76 MHz |
| Confirmation | 108 MHz |

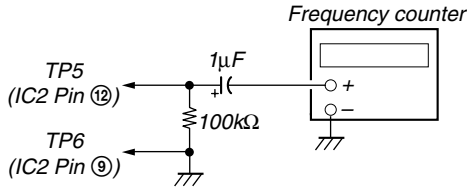
### FM VCO Adjustment

**Procedure :**




*Carrier frequency : 98MHz*
*Modulation : no modulation*
*Output level : 0.1V (100dB)*

1. Connect frequency counter to the positions shown below.
2. Tune the set to 98 MHz.
3. Adjust RV1 so that the value of the frequency counter reading becomes 19 kHz.



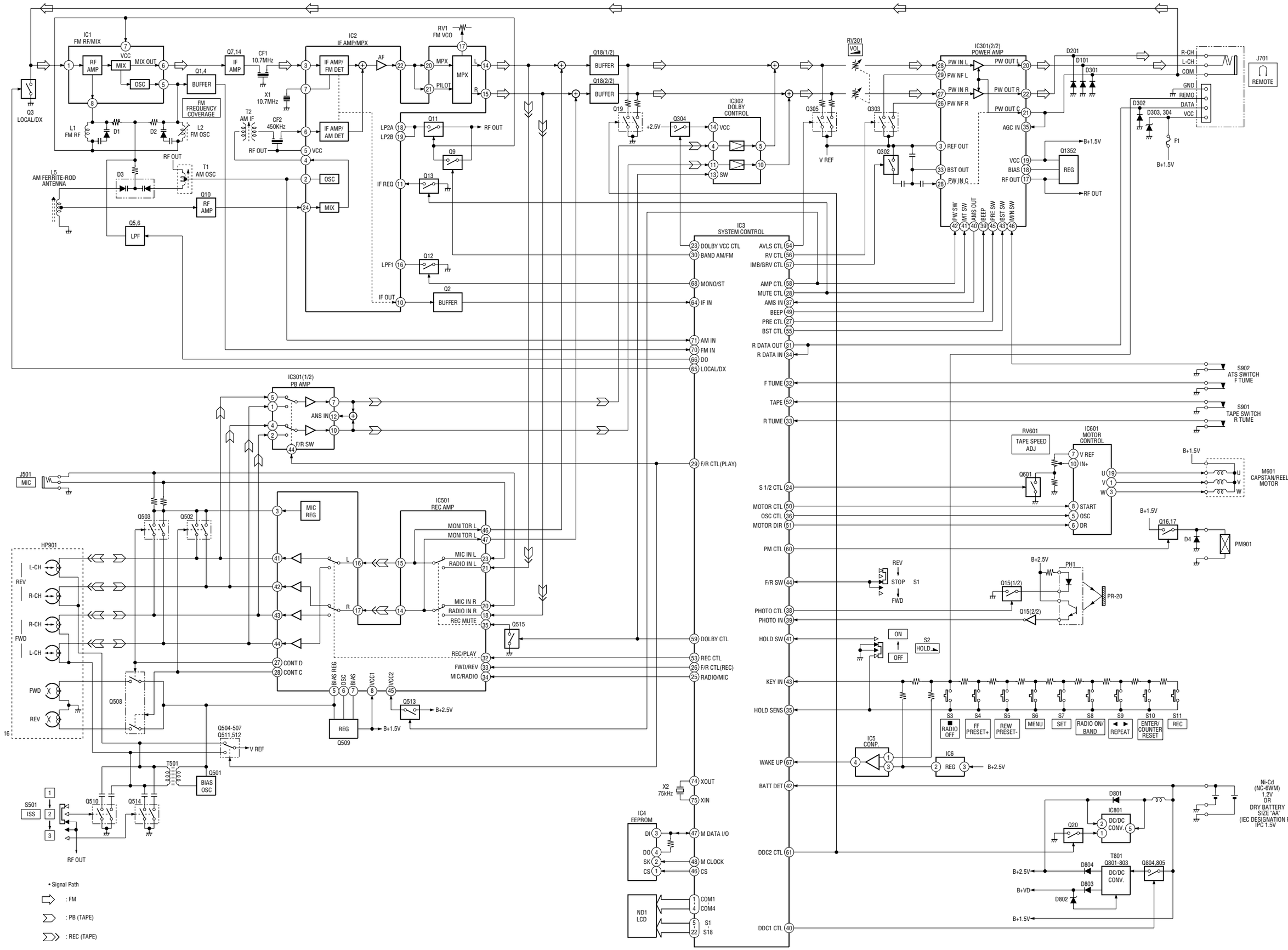

**Specification Value :**

| Frequency counter |
|---|
| 18,900 – 19,100 Hz |

**Adjustment Location:** MAIN board (See page 11)

# SECTION 6
# DIAGRAMS

## 6-1. BLOCK DIAGRAM



**Note on Schematic Diagram:**

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- ▬ : B+ Line.
- ▭ : adjustment for repair.
- Power voltage is dc 1.5 V and fed with regulated dc power supply from battery terminal.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  Main board (1/3)
  no mark : FM/AM, TAPE STOP
  ( ) : FM
  [ ] : AM
  < > : TAPE PB
  Main board (2/3), (3/3)
  no mark : REC / PB
  ( ) : REC
  [ ] : PB
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⋁ : PB
  ⋁» : REC
  ⇨ : FM

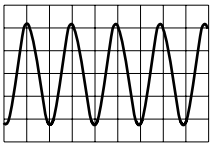
**Note on Printed Wiring Board:**

- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

| Caution: | |
|---|---|
| Pattern face side: (Side A) | Parts on the pattern face side seen from the pattern face are indicated. |
| Parts face side: (Side B) | Parts on the parts face side seen from the parts face are indicated. |

**• Waveform**

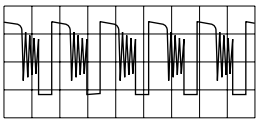
① TP32 20µsec/div 5V/div



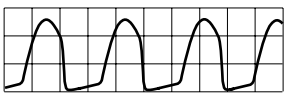
51.7kHz

② IC2 ⑰ VCO 5µsec/div 50mV/div

③ IC801 ⑤ PLAY BACK mode 5µsec/div 1V/div



④ IC3 ⑭ XOUT 5µsec/div 0.5V/div



75kHz

## 6-2. SCHEMATIC DIAGRAM (1/3)

• See page 15 for Waveform. • See page 23 for IC Block Diagrams.

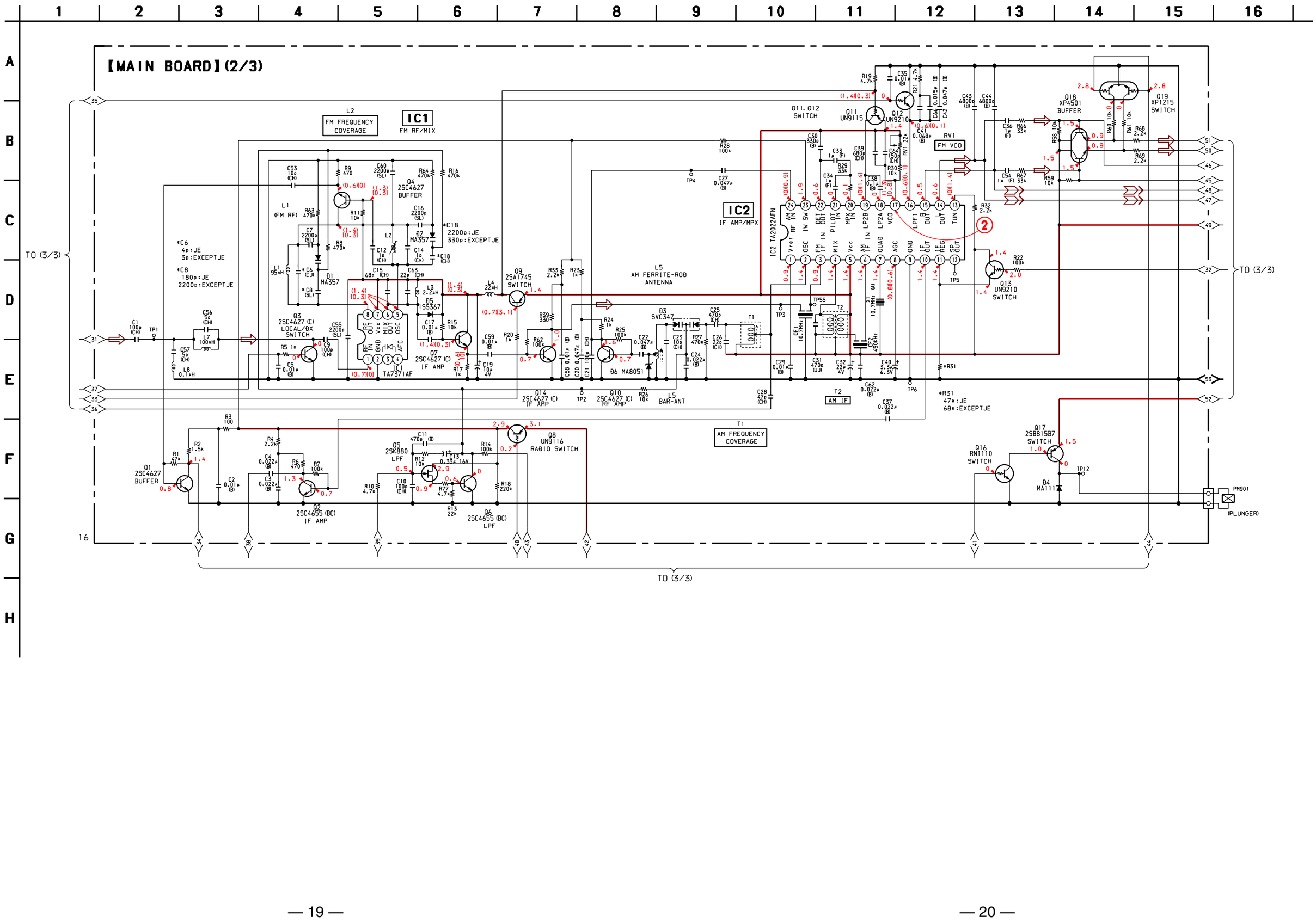
【MAIN BOARD】(1/3)

IC501 REC AMP

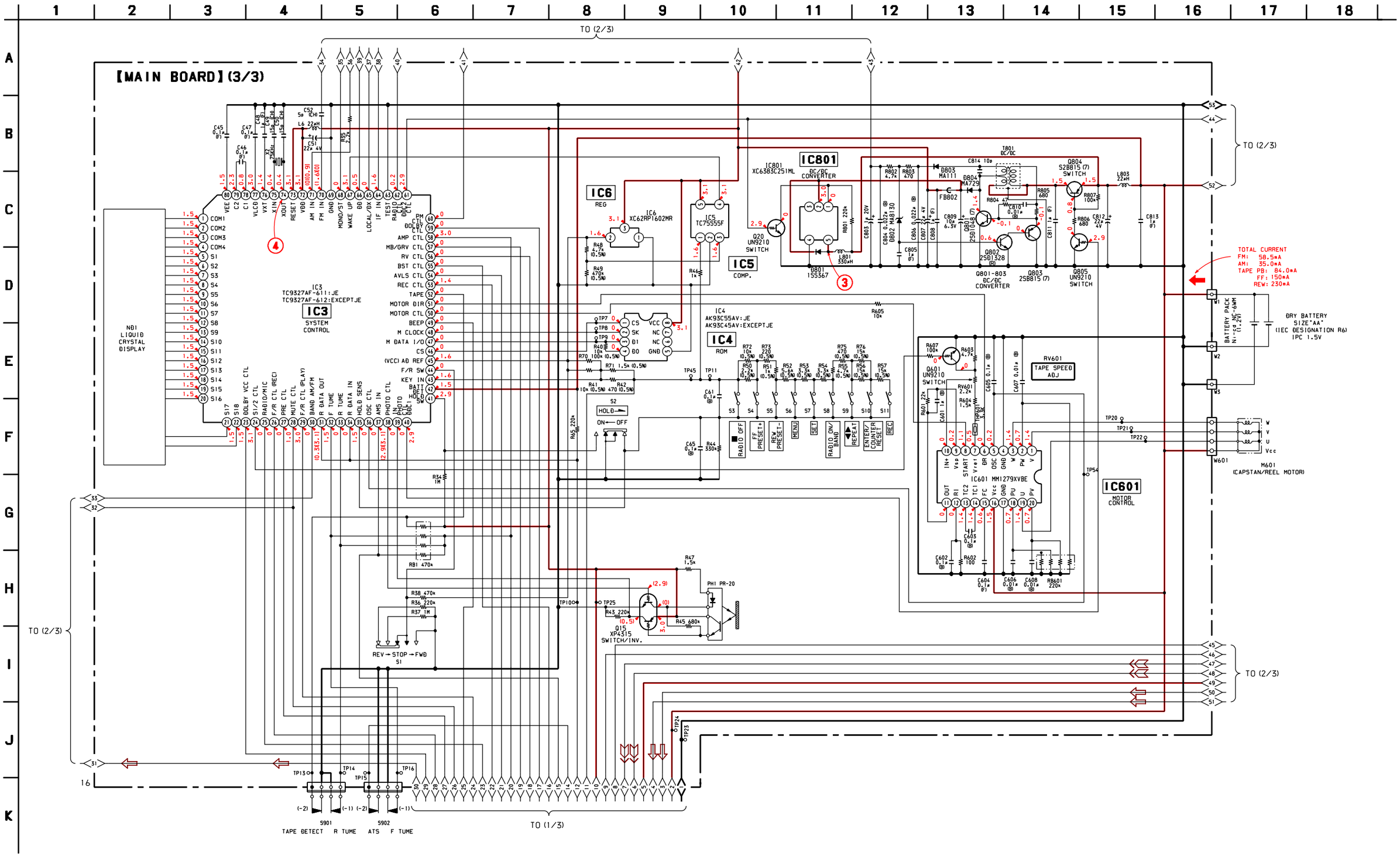
IC301 PB AMP/ POWER AMP

IC302 DOLBY AMP

**6-3. SCHEMATIC DIAGRAM (2/3)** • See page 15 for Waveform. • See page 23 for IC Block Diagrams.

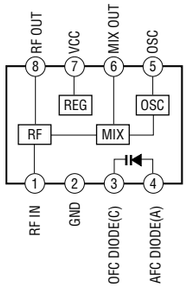


**6-4. SCHEMATIC DIAGRAM (3/3)** • See page 15 for Waveform. • See page 23 for IC Block Diagrams. • See page 29 for IC PIN FUNCTION DESCRIPTION.

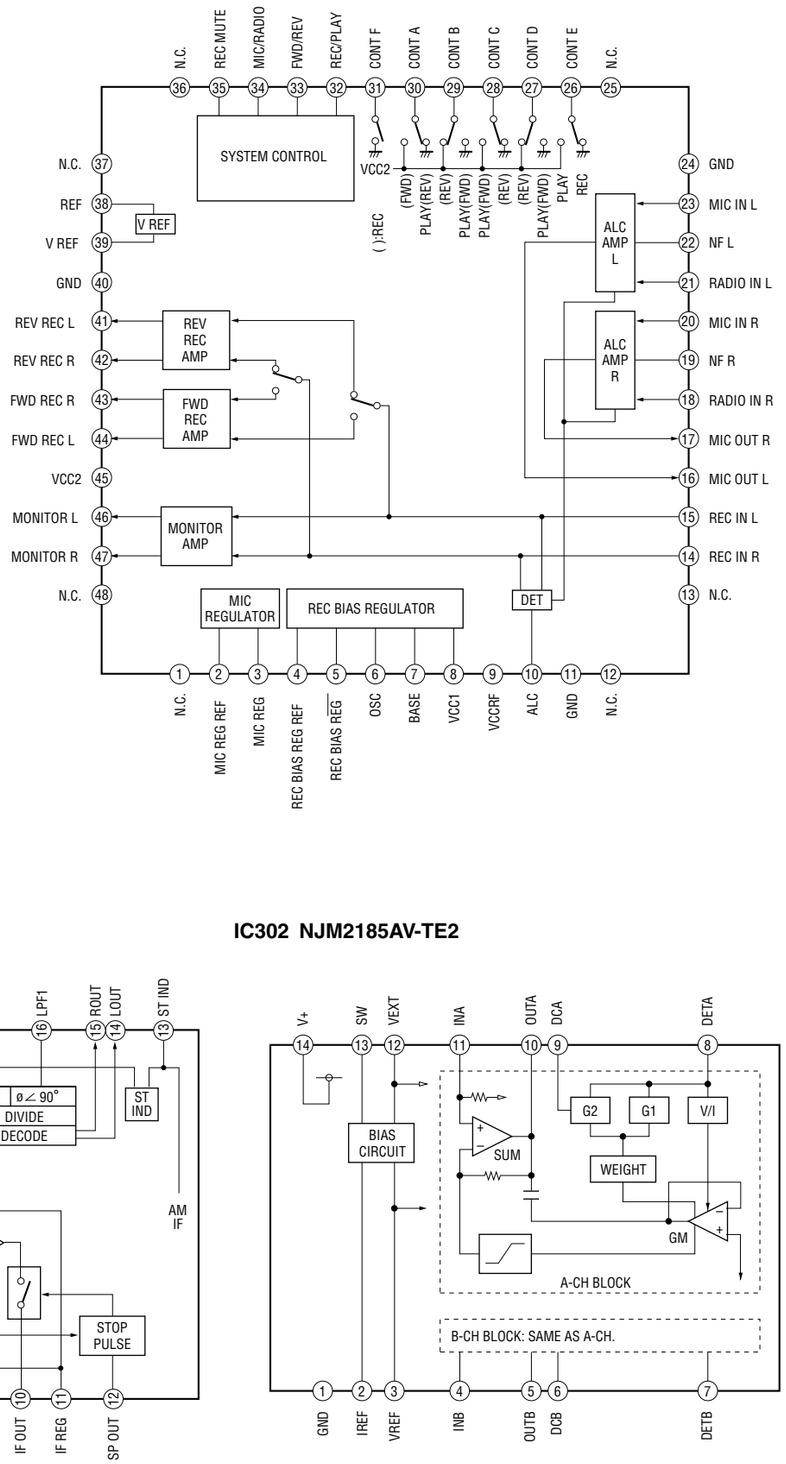


## 6-5. IC BLOCK DIAGRAMS

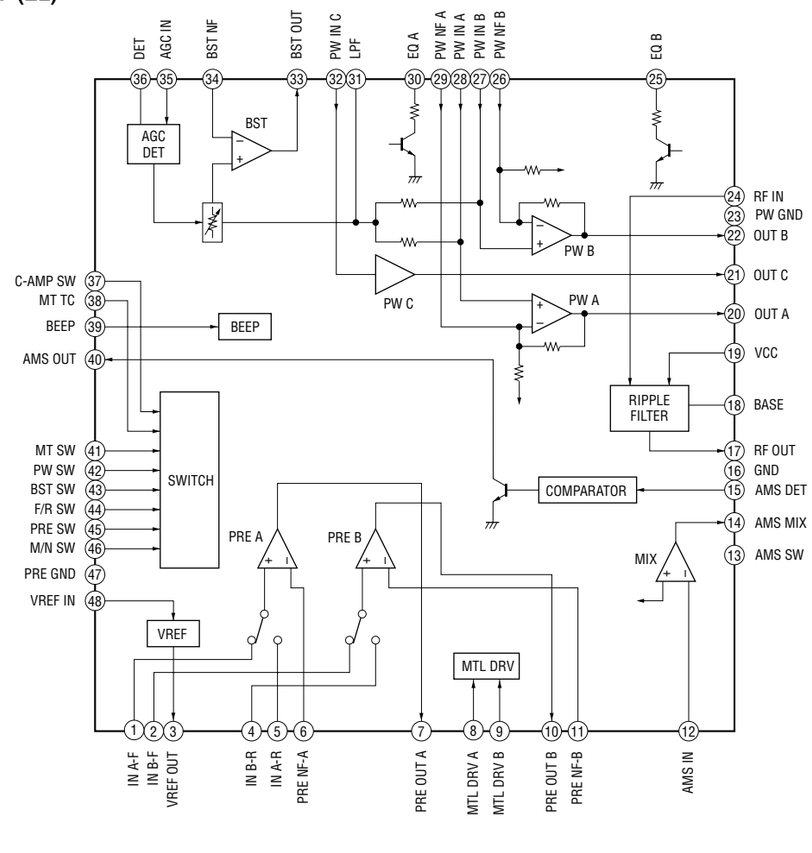
### IC1 TA7371AF-EL



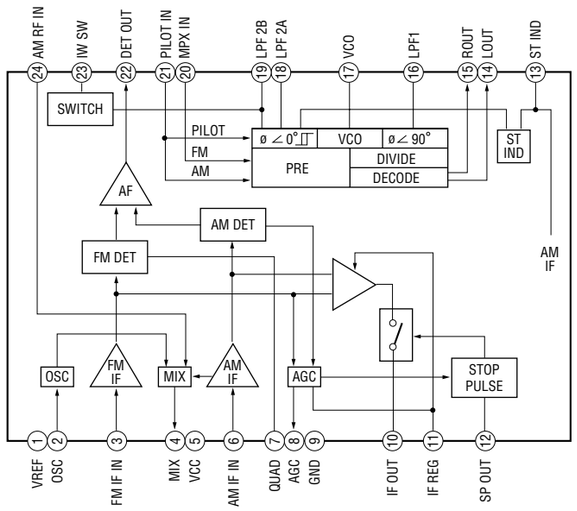

### IC501 LA3235W




### IC301 TA2123AF (EL)



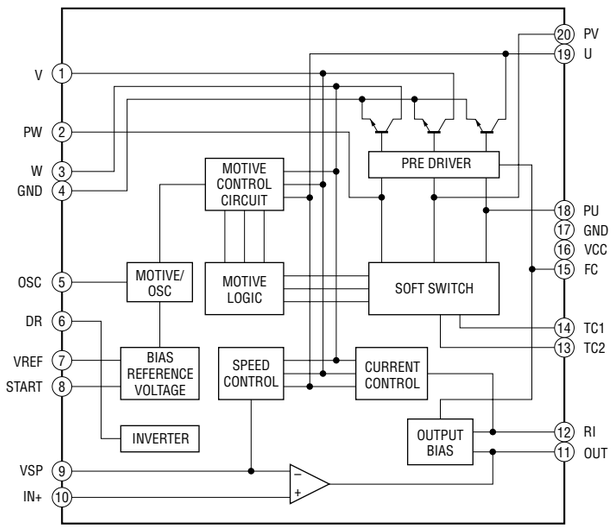

### IC2 TA2022AFN-EL




### IC302 NJM2185AV-TE2

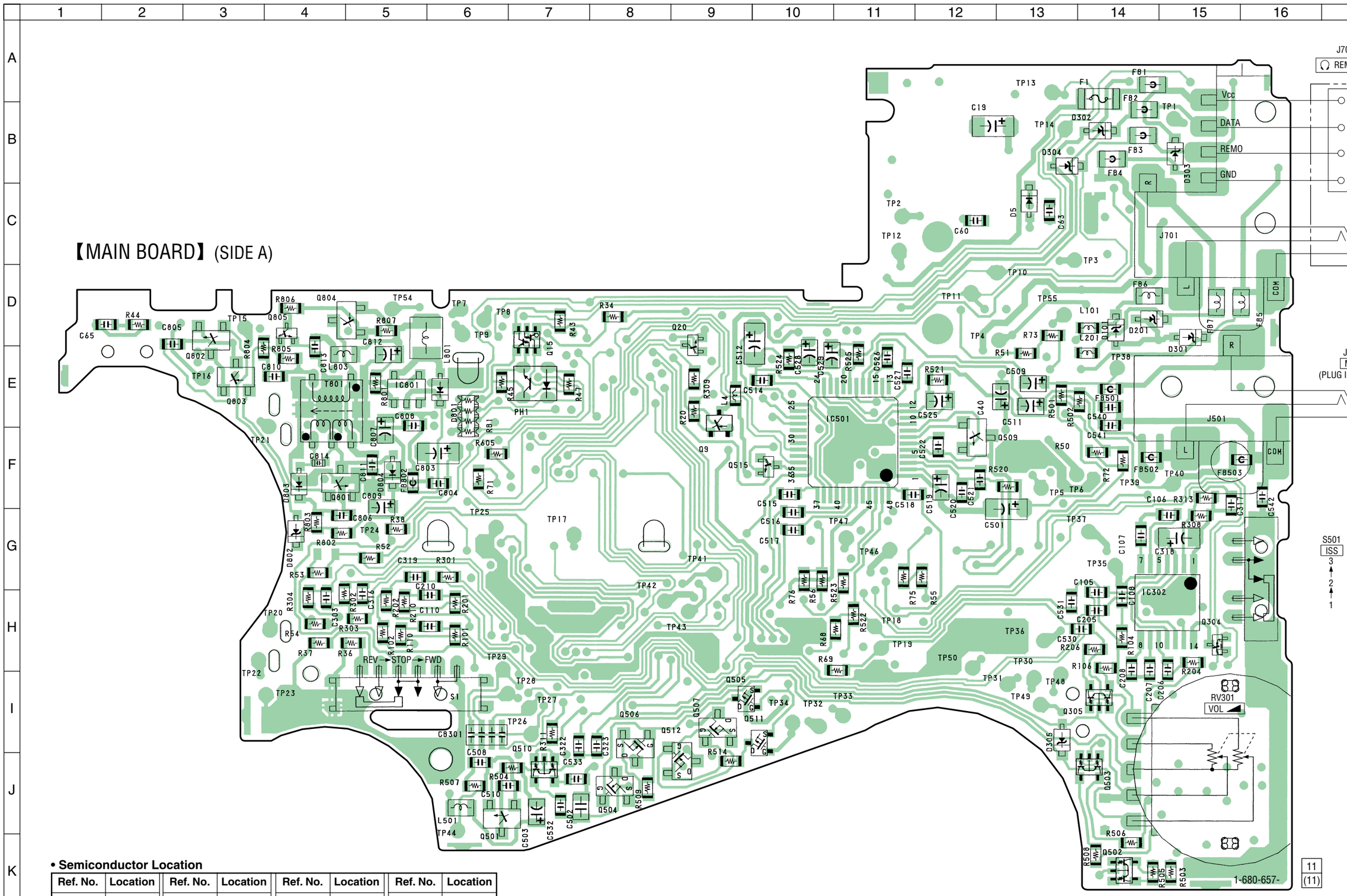



### IC601 MM1279XVBE



## 6-6. PRINTED WIRING BOARD (SIDE A)

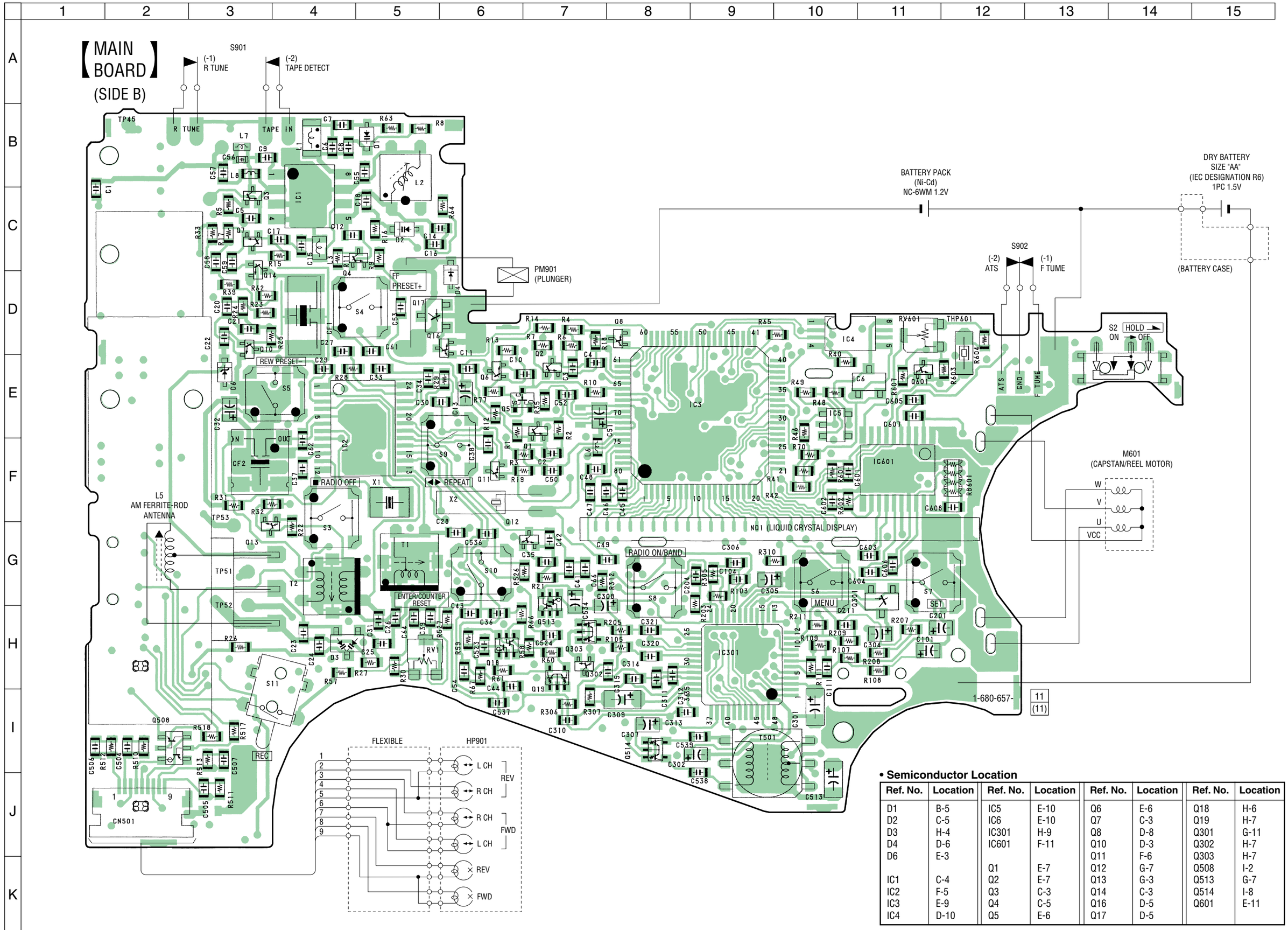
【MAIN BOARD】(SIDE A)




• **Semiconductor Location**

| Ref. No. | Location | Ref. No. | Location | Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|---|---|---|---|
| D5 | B-13 | D803 | F-4 | Q304 | H-15 | Q510 | J-7 |
| D101 | D-14 | D804 | F-5 | Q305 | I-14 | Q511 | I-10 |
| D201 | D-14 | | | Q501 | J-6 | Q512 | J-9 |
| D301 | D-15 | IC302 | G-15 | Q502 | K-14 | Q515 | F-10 |
| D302 | B-14 | IC501 | E-11 | Q503 | J-14 | Q801 | F-4 |
| D303 | B-15 | IC801 | E-5 | Q504 | J-8 | Q802 | D-3 |
| D304 | B-13 | | | Q505 | I-10 | Q803 | E-3 |
| D305 | I-13 | Q9 | E-9 | Q506 | I-8 | Q804 | D-4 |
| D801 | E-6 | Q15 | D-7 | Q507 | I-9 | Q805 | D-4 |
| D802 | G-4 | Q20 | D-9 | Q509 | F-12 | | |

## 6-7. PRINTED WIRING BOARD (SIDE B)




• **Semiconductor Location**

| Ref. No. | Location | Ref. No. | Location | Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|---|---|---|---|
| D1 | B-5 | IC5 | E-10 | Q6 | E-6 | Q18 | H-6 |
| D2 | C-5 | IC6 | E-10 | Q7 | C-3 | Q19 | H-7 |
| D3 | H-4 | IC301 | H-9 | Q8 | D-8 | Q301 | G-11 |
| D4 | D-6 | IC601 | F-11 | Q10 | D-3 | Q302 | H-7 |
| D6 | E-3 | | | Q11 | F-6 | Q303 | H-7 |
| | | Q1 | E-7 | Q12 | G-7 | Q508 | I-2 |
| IC1 | C-4 | Q2 | E-7 | Q13 | G-3 | Q513 | G-7 |
| IC2 | F-5 | Q3 | C-3 | Q14 | C-3 | Q514 | I-8 |
| IC3 | E-9 | Q4 | C-5 | Q16 | D-5 | Q601 | E-11 |
| IC4 | D-10 | Q5 | E-6 | Q17 | D-5 | | |

## 6-8. IC PIN FUNCTION DESCRIPTION

**• IC3 TC9327AF-612 (EXCEPT Tourist MODEL), TC9327AF-611(Tourist MODEL)**

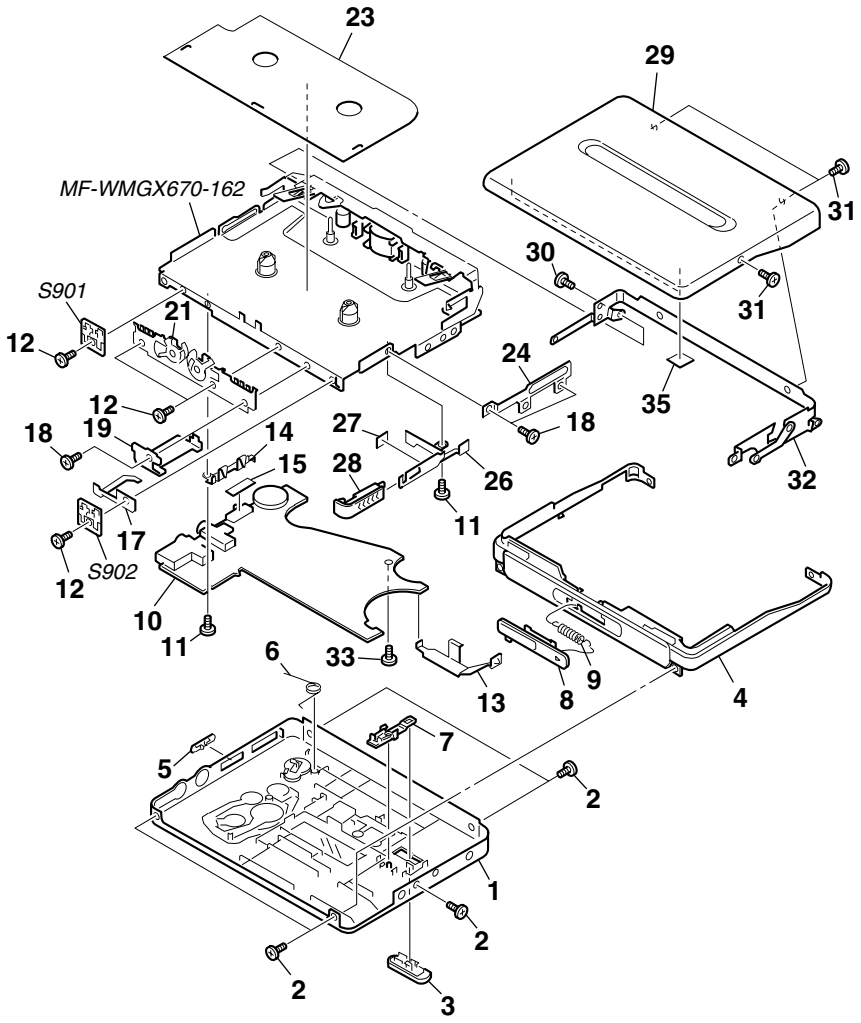
| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 to 4 | COM 1 to COM 4 | O | Common terminal. |
| 5 to 22 | S1 to S18 | O | Segment output terminal. |
| 23 | DOLBY VCC CTL | O | Dolby control terminal. (L: ON, Hi-imp: OFF) |
| 24 | S1/2 CTL | O | Motor speed control terminal. |
| 25 | RADIO/MIC | O | Rec input select terminal.(L: normal, Hi-imp: MIC) |
| 26 | F/R CTL (REC) | O | HEAD select terminal (PLAY mode) (L: REV, Hi-imp: FWD) |
| 27 | PRE CTL | O | PRE AMP control terminal. |
| 28 | MUTE CTL | O | MUTE control terminal (L: MUTE ON). |
| 29 | F/R CTL (PLAY) | O | HEAD select terminal (PLAY mode) (L: FWD, H: REW). |
| 30 | BAND AM/FM | O | BAND control output (L: FM, H: AM). |
| 31 | R DATA OUT | O | Remote control data output. |
| 32 | F TUME | I | TAPE error erase detect terminal. (FWD). |
| 33 | R TUME | I | TAPE error erase detect terminal. (REV). |
| 34 | R DATA IN | I | Remote control data input. |
| 35 | HOLD SENS | I | Input when the key is pressed during HOLD (H= AD Vref). |
| 36 | OSC CTL | I | Tape end Locking detect input terminal. |
| 37 | AMS IN | I | Tape sound existing or not-exiting detect (L: Music exists: H: Music does not exist). |
| 38 | PHOTO CTL | O | Terminal for controlling the rotation detect circuit. |
| 39 | PHOTO IN | I | Rotation detect input. |
| 40 | DDC1 CTL | O | DDC control terminal (H: DDC ON). |
| 41 | HOLD SW | I | HOLD detect input (L: HOLD ON). |
| 42 | BATT DET | I | Voltage detect input. |
| 43 | KEY IN | I | KEY input terminal. |
| 44 | F/R SW | I | TAPE rotating direction detect terminal. |
| 45 | (VCC) AD REF | I | AD IN 1, 2, 3 reference viltage interrupt terminal. |
| 46 | CS | O | $E^2$PROM CS control terminal. |
| 47 | M DATA I/O | I/O | $E^2$PROM DATA I/O. |
| 48 | M CLOCK | O | $E^2$PROM CLOCK terminal. |
| 49 | BEEP | O | BEEP (when TC: 1.6kHz, when CF: 3.0kHz). |
| 50 | MOTOR CTL | O | MOTOR control terminal. |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 51 | MOTOR DIR | O | MOTOR control terminal. |
| 52 | TAPE | I | TAPE detect terminal. (L: ON, H: OFF) |
| 53 | REC CTL | O | REC circuit control output. |
| 54 | AVLS CTL | O | Terminal for controlling AVLS (when ON=H). |
| 55 | BST CTL | O | Tone control terminal (L: normal, Hi-imp: MEGA BASS). |
| 56 | RV CTL | O | Revive control terminal. |
| 57 | MB/GRV CTL | O | Tone control terminal (L: GRV, H: MB). |
| 58 | AMP CTL | O | AMP control output (H: AMP ON). |
| 59 | DOLBY CTL | O | Terminal for controlling DOLBY circuit (L: OFF, Hi-imp: ON). |
| 60 | PM CTL | O | PL control terminal. |
| 61 | DDC2 CTL | O | DDC control terminal (L: OFF, Hi-imp: ON). |
| 62 | RADIO CTL | O | RADIO system control terminal (L: RADIO ON). |
| 63 | TEST | I | TEST terminal (Normal operation at L or NC). |
| 64 | IF IN | I | IF input. |
| 65 | LOCAL/DX | O | TUNER sensitivity select terminal (H: LOCAL, L: DX). |
| 66 | DO | O | Phase comparator output. |
| 67 | WAKE UP | I | External interrupt terminal (Interrupt by key input). |
| 68 | MONO/ST | O | FM MONO/STEREO select terminal (H: MONO, L: ST). |
| 69 | GND | — | Power supply Ground terminal. |
| 70 | FM IN | I | FM local oscillator input. |
| 71 | AM IN | I | AM local oscillator input. |
| 72 | VDD | — | Power supply voltage. |
| 73 | RESET | I | RESET terminal (H during operation). |
| 74 | XOUT | O | Terminal to which external oscillator is connected. |
| 75 | XIN | I | |
| 76 | VXT | — | Terminal to which external capacitor is connected to stabilize crystal oscillator power supply. |
| 77 | VLCD | — | Terminal to step-up power supply voltage for LCD drive. (3V) |
| 78 | C1 | — | Terminal to step-up power supply voltage for LCD drive. |
| 79 | C2 | — | |
| 80 | VEE | — | Terminal for 1.5V constant voltage power supply of LCD drive. |

# SECTION 7
# EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CH : Chinese model.
  EA : Saudi Arabia model.
  JE : Tourist model.
  HK : Hong Kong model.
  KR : Korea model.
  CEV : Poland, Czech, Greece and Turkey models.

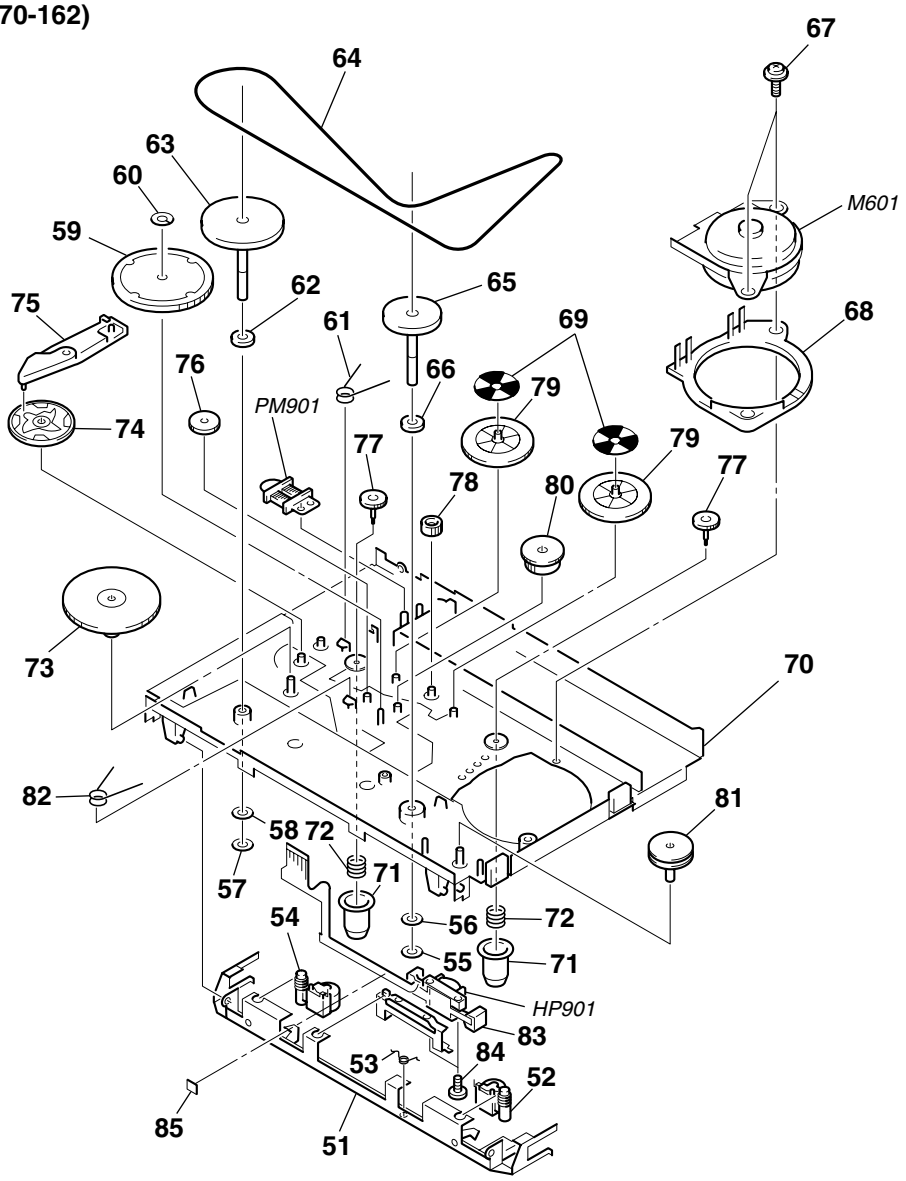
## 7-1. CABINET BLOCK, MAIN BOARD




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | X-3380-273-1 | CASE ASSY (688)(SV)(GX688:CH,EA,JE,HK,KR) | |
| 1 | X-3380-274-1 | CASE ASSY (680) (SV) (GX680:US,CH) | |
| 1 | X-3380-275-1 | CASE ASSY (680) (SV) (GX680:AEP,CEV) | |
| 1 | X-3380-297-1 | CASE ASSY (688) (SV-N) (GX688:E) | |
| 2 | 3-704-197-21 | SCREW (M1.4X2.5), LOCKING | |
| 3 | 3-034-067-01 | KNOB (HOLD-B) | |
| 4 | 3-034-072-11 | ORNAMENT, REEL | |
| 5 | 3-034-066-01 | KNOB(ISS) | |
| 6 | 3-224-649-01 | SPRING (REC) | |
| 7 | 3-034-075-01 | LEVER (HOLD) | |
| 8 | 3-029-219-01 | KNOB (OPEN) | |
| 9 | 3-029-220-11 | SPRING, TENSION | |
| * 10 | A-3021-356-A | MAIN BOARD, COMPLETE (EXCEPT JE) | |
| * 10 | A-3021-357-A | MAIN BOARD, COMPLETE (JE) | |
| 11 | 3-893-942-11 | SCREW (1.7X3), TAPPING (B) | |
| 12 | 3-365-611-05 | SCREW (M1.4) | |
| 13 | 3-029-213-01 | TERMINAL BOARD, BATTERY | |
| 14 | 3-029-210-01 | TERMINAL BOARD (MINUS) | |
| 15 | 3-035-199-01 | SHEET (GR3) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 17 | 1-672-579-11 | ATS FLEXIBLE BOARD | |
| 18 | 3-704-197-01 | SCREW (M1.4X1.6), LOCKING | |
| 19 | 3-034-074-11 | RETAINER, FLEXIBLE | |
| 21 | X-3376-277-1 | BRACKET ASSY | |
| 23 | 3-029-205-01 | COVER, MD (JE) | |
| 23 | 3-029-205-11 | COVER, MD (AEP) | |
| 23 | 3-029-205-21 | COVER, MD (US,CH,E,EA,HK,KR) | |
| 24 | 3-029-217-01 | LEVER (B), LOCK | |
| 26 | X-3377-281-1 | TERMINAL BOARD ASSY, BATTERY | |
| 27 | 3-031-460-01 | SHEET (BT) | |
| 28 | 3-034-068-51 | LID,BATTERY | |
| 29 | A-3052-292-A | LID BLOCK ASSY,CASSETTE | |
| 30 | 3-365-630-41 | SCREW (M1.4) | |
| 31 | 3-704-197-11 | SCREW (M1.4X2.0), LOCKING | |
| 32 | X-3376-279-1 | BRACKET (CASSETTE) ASSY | |
| 33 | 3-345-648-71 | SCREW (M1.4), TOOTHED LOCK | |
| 35 | 3-039-616-01 | SHEET (GR9) | |
| S901 | 1-692-101-11 | SWITCH, LEAF (TAPE DETECT/R TUME) | |
| S902 | 1-692-100-11 | SWITCH, LEAF (ATS/F TUME) | |

## 7-2. MECHANISM DECK BLOCK
## (MF-WMGX670-162)




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | X-3377-038-1 | HOLDER (F) ASSY (/M) | |
| 52 | X-3377-228-1 | LEVER (R) ASSY, PINCH | |
| 53 | 3-046-789-01 | SPRING (HDA) | |
| 54 | X-3377-227-1 | LEVER (N) ASSY, PINCH | |
| 55 | 3-029-276-01 | WASHER (STOPPER R) | |
| 56 | 3-029-289-01 | WASHER | |
| 57 | 3-029-275-01 | WASHER (STOPPER N) | |
| 58 | 3-029-278-01 | WASHER | |
| 59 | X-3376-813-1 | CLUTCH ASSY (F) | |
| 60 | 3-932-724-21 | WASHER | |
| 61 | 3-040-897-01 | SPRING (TGA), TORSION | |
| 62 | 3-386-694-01 | WASHER | |
| 63 | 3-029-306-11 | FLYWHEEL (N), INSERT | |
| 64 | 3-032-576-01 | BELT | |
| 65 | 3-029-268-11 | FLYWHEEL (R), INSERT | |
| 66 | 3-007-428-01 | WASHER (R) | |
| 67 | 3-029-765-01 | SCREW (M1.4), TOOTHED LOCK | |
| 68 | 3-029-274-01 | RETAINER (F2), MOTOR | |
| 69 | 3-007-433-01 | SHEET (N), REFLECTION | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 70 | X-3377-584-1 | CHASSIS ASSY (F) | |
| 71 | 3-010-274-02 | TABLE, REEL | |
| 72 | 3-010-954-01 | SPRING (BT), COMPRESSION | |
| 73 | 3-029-282-01 | GEAR(Y) | |
| 74 | 3-029-285-01 | GEAR, CAM | |
| 75 | 3-029-284-01 | LEVER, TRIGGER | |
| 76 | 3-029-281-01 | GEAR, IDLER (B) | |
| 77 | 3-010-273-02 | GEAR (REEL) | |
| 78 | 3-029-273-01 | GEAR (FR) | |
| 79 | 3-029-283-01 | GEAR, IDLER (A) | |
| 80 | 3-029-286-01 | GEAR(NR) | |
| 81 | 3-029-288-01 | PULLEY, REVERSE | |
| 82 | 3-029-272-02 | SPRING (FR), TORSION | |
| 83 | 3-032-575-11 | LEVER, HEAD | |
| 84 | 3-704-413-31 | SCREW (M1.4X7.2) | |
| 85 | 3-033-757-01 | SHEET(H) | |
| HP901 | 1-500-355-21 | HEAD, MAGNETIC (REC/PB/ERASE) | |
| M601 | 1-763-166-11 | MOTOR (CAPSTAN/REEL)(WITH PULLEY) | |
| PM901 | 1-454-674-31 | SOLENOID, PLUNGER | |

# SECTION 8
# ELECTRICAL PARTS LIST

**MAIN**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  CH : Chinese model.
  EA : Saudi Arabia model.
  JE : Tourist model.
  HK : Hong Kong model.
  KR : Korea model.

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| * | A-3021-356-A | MAIN BOARD, COMPLETE (EXCEPT JE) | | | | |
| | | ********** | | | | |
| * | A-3021-357-A | MAIN BOARD, COMPLETE (JE) | | | | |
| | | ********** | | | | |
| | 1-694-502-11 | CONDUCTIVE BOARD, CONNECTION | | | | |
| | 3-034-073-01 | HOLDER (LCD) | | | | |
| | | < CAPACITOR > | | | | |
| C1 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C2 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C3 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C4 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C5 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C6 | 1-162-908-11 | CERAMIC CHIP | 3PF | 0.25PF | 50V | (EXCEPT JE) |
| C6 | 1-162-909-11 | CERAMIC CHIP | 4PF | 0.25PF | 50V | (JE) |
| C7 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V | |
| C8 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V | (EXCEPT JE) |
| C8 | 1-164-218-11 | CERAMIC CHIP | 180PF | 0.25PF | 50V | (JE) |
| C9 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C10 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C11 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V | |
| C12 | 1-162-905-11 | CERAMIC CHIP | 1PF | 0.25PF | 50V | |
| C13 | 1-107-817-11 | TANTAL. CHIP | 0.33uF | 10.00% | 16V | |
| C14 | 1-162-905-11 | CERAMIC CHIP | 1PF | 0.25PF | 50V | |
| C15 | 1-162-925-11 | CERAMIC CHIP | 68PF | 5.00% | 50V | |
| C16 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V | |
| C17 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C18 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V | (EXCEPT JE) |
| C18 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V(JE) | |
| C19 | 1-135-201-11 | TANTALUM CHIP | 10uF | 20% | 4V | |
| C20 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10.00% | 16V | |
| C21 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C22 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10.00% | 16V | |
| C23 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V | |
| C24 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C25 | 1-164-315-11 | CERAMIC CHIP | 470PF | 5.00% | 50V | |
| C26 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V | |
| C27 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10.00% | 16V | |
| C28 | 1-162-923-11 | CERAMIC CHIP | 47PF | 5% | 50V | |
| C29 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C30 | 1-162-961-11 | CERAMIC CHIP | 330PF | 10% | 50V | |
| C31 | 1-164-362-11 | CERAMIC CHIP | 470PF | 5.00% | 50V | |
| C32 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V | |
| C33 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C34 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C35 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C36 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C37 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C38 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V | |
| C39 | 1-115-412-11 | CERAMIC CHIP | 680PF | 5.00% | 25V | |
| C40 | 1-127-578-11 | TANTAL. CHIP | 3.3uF | 20% | 6.3V | |
| C41 | 1-110-563-11 | CERAMIC CHIP | 0.068uF | 10.00% | 16V | |
| C42 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10.00% | 16V | |
| C43 | 1-162-969-11 | CERAMIC CHIP | 0.0068uF | 10% | 25V | |
| C44 | 1-162-969-11 | CERAMIC CHIP | 0.0068uF | 10% | 25V | |
| C45 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V | |
| C46 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V | |
| C47 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V | |
| C48 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C49 | 1-162-917-11 | CERAMIC CHIP | 15PF | 5% | 50V | |
| C50 | 1-162-917-11 | CERAMIC CHIP | 15PF | 5% | 50V | |
| C51 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V | |
| C52 | 1-162-910-11 | CERAMIC CHIP | 5PF | 0.25PF | 50V | |
| C53 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V | |
| C54 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C55 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V | |
| C56 | 1-164-845-11 | CERAMIC CHIP | 5PF | 0.25PF | 16V | |
| C57 | 1-162-910-11 | CERAMIC CHIP | 5PF | 0.25PF | 50V | |
| C58 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C59 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V | |
| C60 | 1-164-676-11 | CERAMIC CHIP | 2200PF | 5.00% | 16V | |
| C61 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V | |
| C62 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C63 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V | |
| C64 | 1-164-217-11 | CERAMIC CHIP | 150PF | 5.00% | 50V | |
| C65 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V | |
| C66 | 1-164-245-11 | CERAMIC CHIP | 0.015uF | 10.00% | 25V | |
| C101 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V | |
| C104 | 1-117-863-11 | CERAMIC CHIP | 0.47uF | 10.00% | 6.3V | |
| C105 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C106 | 1-117-863-11 | CERAMIC CHIP | 0.47uF | 10.00% | 6.3V | |
| C107 | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10.00% | 10V | |
| C108 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C110 | 1-164-677-11 | CERAMIC CHIP | 0.033uF | 10.00% | 16V | |
| C111 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |
| C201 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V | |
| C204 | 1-117-863-11 | CERAMIC CHIP | 0.47uF | 10.00% | 6.3V | |
| C205 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C206 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V | |
| C207 | 1-117-863-11 | CERAMIC CHIP | 0.47uF | 10.00% | 6.3V | |
| C208 | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10.00% | 10V | |
| C210 | 1-164-677-11 | CERAMIC CHIP | 0.033uF | 10.00% | 16V | |
| C211 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V | |

## MAIN

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C301 | 1-119-663-11 | TANTAL. CHIP | 47uF | 20.00% | 2.5V |
| C302 | 1-107-815-11 | TANTAL. CHIP | 2.2uF | 20.00% | 4V |
| C303 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C304 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C305 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C306 | 1-117-863-11 | CERAMIC CHIP | 0.47uF | 10.00% | 6.3V |
| C307 | 1-117-181-11 | TANTAL. CHIP | 4.7uF | 20.00% | 2.5V |
| C308 | 1-117-181-11 | TANTAL. CHIP | 4.7uF | 20.00% | 2.5V |
| C309 | 1-135-149-21 | TANTALUM CHIP | 2.2uF | 20% | 10V |
| C310 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C311 | 1-165-112-11 | CERAMIC CHIP | 0.33uF | | 16V |
| C312 | 1-165-128-11 | CERAMIC CHIP | 0.22uF | | 16V |
| C313 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C314 | 1-165-128-11 | CERAMIC CHIP | 0.22uF | | 16V |
| C315 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C316 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C317 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C318 | 1-135-201-11 | TANTALUM CHIP | 10uF | 20% | 4V |
| C319 | 1-162-969-11 | CERAMIC CHIP | 0.0068uF | 10% | 25V |
| C320 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C321 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C322 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C323 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C501 | 1-135-201-11 | TANTALUM CHIP | 10uF | 20% | 4V |
| C502 | 1-164-690-11 | CERAMIC CHIP | 0.0022uF | 5.00% | 50V |
| C503 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C504 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C505 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C506 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C507 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C508 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C509 | 1-135-337-11 | TANTAL. CHIP | 1uF | 20.00% | 6.3V |
| C510 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C511 | 1-135-337-11 | TANTAL. CHIP | 1uF | 20.00% | 6.3V |
| C512 | 1-135-149-21 | TANTALUM CHIP | 2.2uF | 20% | 10V |
| C513 | 1-119-663-11 | TANTAL. CHIP | 47uF | 20.00% | 2.5V |
| C514 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C515 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C516 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C517 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C518 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C519 | 1-135-337-11 | TANTAL. CHIP | 1uF | 20.00% | 6.3V |
| C520 | 1-165-128-11 | CERAMIC CHIP | 0.22uF | | 16V |
| C521 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C522 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C523 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C524 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C525 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C526 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C527 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C528 | 1-117-181-11 | TANTAL. CHIP | 4.7uF | 20.00% | 2.5V |
| C529 | 1-117-181-11 | TANTAL. CHIP | 4.7uF | 20.00% | 2.5V |
| C530 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C531 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C532 | 1-164-230-11 | CERAMIC CHIP | 220PF | 5.00% | 50V |
| C533 | 1-164-230-11 | CERAMIC CHIP | 220PF | 5.00% | 50V |
| C534 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C536 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C537 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C538 | 1-164-315-11 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C539 | 1-164-315-11 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C540 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5.00% | 25V |
| C541 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5.00% | 25V |
| C542 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C601 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C602 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V |
| C603 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V |
| C604 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C605 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10.00% | 16V |
| C606 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C607 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C608 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C803 | 1-135-177-21 | TANTALUM CHIP | 1uF | 20% | 20V |
| C804 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C805 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C806 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C807 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C808 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C809 | 1-117-919-11 | TANTAL. CHIP | 10uF | 20.00% | 6.3V |
| C810 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C811 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C812 | 1-125-984-11 | TANTAL. CHIP | 22uF | 20% | 4V |
| C813 | 1-115-156-11 | CERAMIC CHIP | 1uF | | 10V |
| C814 | 1-164-850-11 | CERAMIC CHIP | 10PF | 0.50PF | 16V |
| | | < COMPOSITION CIRCUIT BLOCK > | | | |
| CB301 | 1-117-968-11 | CERAMIC CHIP 680PF | | | 50V |
| | | < FILTER > | | | |
| CF1 | 1-767-362-11 | FILTER, CERAMIC | | | |
| CF2 | 1-767-480-11 | FILTER, CERAMIC (AM) | | | |
| | | < CONNECTOR > | | | |
| CN501 | 1-766-339-21 | CONNECTOR, FFC/FPC 9P | | | |
| | | < DIODE > | | | |
| D1 | 8-719-050-97 | DIODE MA357(E)-(TX).SO | | | |
| D2 | 8-719-050-97 | DIODE MA357(E)-(TX).SO | | | |
| D3 | 8-719-072-58 | DIODE SVC347-TL | | | |
| D4 | 8-719-073-01 | DIODE MA111-(K8).S0 | | | |
| D5 | 8-719-049-09 | DIODE 1SS367-T3SONY | | | |
| D6 | 8-719-422-37 | DIODE MA8051 | | | |
| D101 | 8-719-422-37 | DIODE MA8051 | | | |
| D201 | 8-719-422-37 | DIODE MA8051 | | | |
| D301 | 8-719-422-37 | DIODE MA8051 | | | |
| D302 | 8-719-422-37 | DIODE MA8051 | | | |
| D303 | 8-719-422-37 | DIODE MA8051 | | | |
| D304 | 8-719-422-37 | DIODE MA8051 | | | |
| D305 | 8-719-422-37 | DIODE MA8051 | | | |
| D801 | 8-719-049-09 | DIODE 1SS367-T3SONY | | | |
| D802 | 8-719-420-87 | DIODE MA8130 | | | |
| D803 | 8-719-073-01 | DIODE MA111-(K8).S0 | | | |
| D804 | 8-719-420-51 | DIODE MA729 | | | |
| | | < FUSE > | | | |
| F1 | 1-576-439-21 | FUSE (SMD) 0.25A/125V | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < FERRITE BEAD > | |
| FB1 | 1-500-445-21 | FERRITE 0uH | |
| FB2 | 1-500-445-21 | FERRITE 0uH | |
| FB3 | 1-500-445-21 | FERRITE 0uH | |
| FB4 | 1-500-245-11 | FERRITE 0uH | |
| FB5 | 1-410-997-31 | INDUCTOR 2.2uH | |
| FB6 | 1-410-997-31 | INDUCTOR 2.2uH | |
| FB7 | 1-410-997-31 | INDUCTOR 2.2uH | |
| FB501 | 1-414-760-21 | FERRITE 0uH | |
| FB502 | 1-414-760-21 | FERRITE 0uH | |
| FB503 | 1-414-760-21 | FERRITE 0uH | |
| FB802 | 1-414-760-21 | FERRITE 0uH | |
| | | < IC > | |
| IC1 | 8-759-362-23 | IC TA7371AF-EL | |
| IC2 | 8-759-362-25 | IC TA2022AFN-EL | |
| IC3 | 8-759-697-49 | IC TC9327AF-612 (EXCEPT JE) | |
| IC3 | 8-759-697-50 | IC TC9327AF-611 (JE) | |
| IC4 | 6-701-939-01 | IC AK93C55-SG677 (JE) | |
| IC4 | 6-701-943-01 | IC AK93C55-SGU670 (US) | |
| IC4 | 6-701-944-01 | IC AK93C55-SGE670 (E, HK, KR) | |
| IC4 | 6-701-945-01 | IC AK93C55-SGEN670 (AEP, CH, EA) | |
| IC5 | 8-759-387-31 | IC TC75S55F(TE85R) | |
| IC6 | 8-759-457-70 | IC XC62RP1602MR | |
| IC301 | 8-759-579-12 | IC TA2123AF(EL) | |
| IC302 | 8-759-488-80 | IC NJM2185AV-TE2 | |
| IC501 | 8-759-428-23 | IC LA3235W | |
| IC601 | 8-759-356-46 | IC MM1279XVBE | |
| IC801 | 8-759-553-28 | IC XC6383C251ML | |
| | | < JACK > | |
| J501 | 1-766-907-43 | JACK 3P (MIC(PLUG IN POWER)) | |
| J701 | 1-779-867-11 | JACK (🎧 / REMOTE) | |
| | | < COIL > | |
| L1 | 1-469-373-21 | INDUCTOR 95nH | |
| L2 | 1-416-941-11 | COIL (FM OSC) (EXCEPT JE) | |
| L2 | 1-416-941-31 | COIL (FM OSC) (JE) | |
| L3 | 1-410-997-31 | INDUCTOR 2.2uH | |
| L4 | 1-412-995-21 | INDUCTOR 22uH | |
| L5 | 1-754-046-11 | ANTENNA, FERRITE-ROD | |
| L6 | 1-412-995-21 | INDUCTOR 22uH | |
| L7 | 1-469-189-11 | INDUCTOR 100nH | |
| L8 | 1-412-967-31 | INDUCTOR 0.1uH | |
| L101 | 1-412-995-21 | INDUCTOR 22uH | |
| L201 | 1-412-995-21 | INDUCTOR 22uH | |
| L501 | 1-412-010-41 | INDUCTOR 22uH | |
| L801 | 1-412-034-11 | INDUCTOR 330uH | |
| L803 | 1-412-010-41 | INDUCTOR 22uH | |
| | | < LIQUID CRYSTAL DISPLAY > | |
| ND1 | 1-803-469-11 | DISPLAY PANEL, LIQUID CRYSTAL | |
| | | < PHOTO INTERRUPTER > | |
| PH1 | 8-749-014-43 | PHOTO REFLECTOR PR-20-T | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < TRANSISTOR > | |
| Q1 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q2 | 8-729-028-69 | TRANSISTOR 2SC4655-BC(TX) | |
| Q3 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q4 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q5 | 8-729-053-44 | TRANSISTOR 2SK880-Y-TE85R | |
| Q6 | 8-729-028-69 | TRANSISTOR 2SC4655-BC(TX) | |
| Q7 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q8 | 8-729-037-64 | TRANSISTOR UN9116J-(TX).SO | |
| Q9 | 8-729-823-86 | TRANSISTOR 2SA1745 | |
| Q10 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q11 | 8-729-037-63 | TRANSISTOR UN9115J-(TX).SO | |
| Q12 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q13 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q14 | 8-729-037-89 | TRANSISTOR 2SC4627J-C(TX).SO | |
| Q15 | 8-729-425-46 | TRANSISTOR XP4315-TXE | |
| Q16 | 8-729-013-60 | TRANSISTOR RN1110-TE85L | |
| Q17 | 8-729-800-71 | TRANSISTOR 2SB815B7-TB | |
| Q18 | 8-729-427-72 | TRANSISTOR XP4501 | |
| Q19 | 8-729-426-36 | TRANSISTOR XP1215-TXE | |
| Q20 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q301 | 8-729-800-71 | TRANSISTOR 2SB815B7-TB | |
| Q302 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q303 | 8-729-426-36 | TRANSISTOR XP1215-TXE | |
| Q304 | 8-729-037-62 | TRANSISTOR UN9114J-(TX).SO | |
| Q305 | 8-729-426-36 | TRANSISTOR XP1215-TXE | |
| Q501 | 8-729-141-75 | TRANSISTOR 2SD596DV345 | |
| Q502 | 8-729-425-89 | TRANSISTOR XP1115 | |
| Q503 | 8-729-425-89 | TRANSISTOR XP1115 | |
| Q504 | 8-729-028-27 | TRANSISTOR 2SK2009(TE85L) | |
| Q505 | 8-729-422-51 | TRANSISTOR UN5110-QRS | |
| Q506 | 8-729-028-27 | TRANSISTOR 2SK2009(TE85L) | |
| Q507 | 8-729-028-27 | TRANSISTOR 2SK2009(TE85L) | |
| Q508 | 8-729-422-39 | TRANSISTOR XN4404 | |
| Q509 | 8-729-800-71 | TRANSISTOR 2SB815B7-TB | |
| Q510 | 8-729-426-36 | TRANSISTOR XP1215-TXE | |
| Q511 | 8-729-028-23 | TRANSISTOR 2SJ344(TE85L) | |
| Q512 | 8-729-028-27 | TRANSISTOR 2SK2009(TE85L) | |
| Q513 | 8-729-425-46 | TRANSISTOR XP4315-TXE | |
| Q514 | 8-729-426-36 | TRANSISTOR XP1215-TXE | |
| Q515 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q601 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| Q801 | 8-729-800-37 | TRANSISTOR 2SD1048-X7 | |
| Q802 | 8-729-400-55 | TRANSISTOR 2SD1328-S | |
| Q803 | 8-729-800-71 | TRANSISTOR 2SB815B7-TB | |
| Q804 | 8-729-800-71 | TRANSISTOR 2SB815B7-TB | |
| Q805 | 8-729-037-71 | TRANSISTOR UN9210J-(TX).SO | |
| | | < RESISTOR > | |
| R1 | 1-216-841-11 | METAL CHIP 47K 5% 1/16W | |
| R2 | 1-216-823-11 | METAL CHIP 1.5K 5% 1/16W | |
| R3 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R4 | 1-216-825-11 | METAL CHIP 2.2K 5% 1/16W | |
| R5 | 1-216-821-11 | METAL CHIP 1K 5% 1/16W | |

## MAIN

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R6 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R7 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R8 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R9 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R10 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R11 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R12 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R13 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R14 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R15 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R16 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R17 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R18 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R19 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R20 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R21 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R22 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R23 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R24 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R25 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R26 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R27 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R28 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R29 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R30 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R31 | 1-216-843-11 | METAL CHIP | 68K | 5% | 1/16W (EXCEPT JE) |
| R31 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W (JE) |
| R32 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R33 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R34 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R35 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R36 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R37 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R38 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R39 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/16W |
| R40 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R41 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R42 | 1-218-839-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R43 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R44 | 1-216-851-11 | METAL CHIP | 330K | 5% | 1/16W |
| R45 | 1-216-855-11 | METAL CHIP | 680K | 5% | 1/16W |
| R46 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R47 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R48 | 1-218-863-11 | METAL CHIP | 4.7K | 0.5% | 1/16W |
| R49 | 1-218-911-11 | METAL CHIP | 470K | 0.5% | 1/16W |
| R50 | 1-218-855-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R51 | 1-218-847-11 | METAL CHIP | 1K | 0.5% | 1/16W |
| R52 | 1-218-865-11 | METAL CHIP | 5.6K | 0.5% | 1/16W |
| R53 | 1-218-859-11 | METAL CHIP | 3.3K | 0.5% | 1/16W |
| R54 | 1-218-859-11 | METAL CHIP | 3.3K | 0.5% | 1/16W |
| R55 | 1-218-863-11 | METAL CHIP | 4.7K | 0.5% | 1/16W |
| R56 | 1-218-875-11 | METAL CHIP | 15K | 0.5% | 1/16W |
| R57 | 1-218-875-11 | METAL CHIP | 15K | 0.5% | 1/16W |
| R58 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R59 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R60 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R61 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R62 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R63 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R64 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R65 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R66 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R67 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R68 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R69 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R70 | 1-218-895-11 | METAL CHIP | 100K | 0.5% | 1/16W |
| R71 | 1-218-851-11 | METAL CHIP | 1.5K | 0.5% | 1/16W |
| R72 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R73 | 1-218-831-11 | METAL CHIP | 220 | 0.5% | 1/16W |
| R75 | 1-218-839-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R76 | 1-218-875-11 | METAL CHIP | 15K | 0.5% | 1/16W |
| R77 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R101 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R102 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R103 | 1-216-789-11 | METAL CHIP | 2.2 | 5% | 1/16W |
| R104 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R105 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R106 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R107 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R108 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R109 | 1-218-344-11 | RES-CHIP | 7.5K | 5% | 1/16W |
| R110 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R111 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R201 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R202 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R203 | 1-216-789-11 | METAL CHIP | 2.2 | 5% | 1/16W |
| R204 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R205 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R206 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R207 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R208 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R209 | 1-218-344-11 | RES-CHIP | 7.5K | 5% | 1/16W |
| R210 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R211 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R301 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R302 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R303 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R304 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R305 | 1-216-789-11 | METAL CHIP | 2.2 | 5% | 1/16W |
| R306 | 1-216-851-11 | METAL CHIP | 330K | 5% | 1/16W |
| R307 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R308 | 1-218-887-11 | METAL CHIP | 47K | 0.5% | 1/16W |
| R309 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R310 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R311 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R312 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R313 | 1-218-899-11 | METAL CHIP | 150K | 0.5% | 1/16W |
| R501 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R502 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R503 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R504 | 1-216-789-11 | METAL CHIP | 2.2 | 5% | 1/16W |
| R505 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R506 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R507 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R508 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R509 | 1-216-863-11 | RES-CHIP | 3.3M | 5% | 1/16W |
| R510 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R511 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R512 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R513 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R514 | 1-216-863-11 | RES-CHIP | 3.3M | 5% | 1/16W |
| R517 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R518 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R520 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R521 | 1-216-859-11 | RES-CHIP | 1.5M | 5% | 1/16W |
| R522 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R523 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R524 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R525 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R526 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R527 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R601 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R602 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R603 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R604 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R605 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R607 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R801 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R802 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R803 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R804 | 1-216-805-11 | METAL CHIP | 47 | 5% | 1/16W |
| R805 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R806 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R807 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| | | < COMPOSITION CIRCUIT BLOCK > | | | |
| RB1 | 1-233-811-11 | RES, NETWORK 470K(3216) | | | |
| RB601 | 1-233-873-21 | RES, NETWORK (CHIP TYPE)(3216) | | | |
| | | < VARIABLE RESISTOR > | | | |
| RV1 | 1-225-903-11 | RES, ADJ, CERMET (3 TYPE) 22K | | | |
| RV301 | 1-225-684-11 | RES, VAR, CARBON 30K/30K (VOL ◢) | | | |
| RV601 | 1-223-274-11 | RES, ADJ, CERMET (3 TYPE) 2.2K | | | |
| | | < SWITCH > | | | |
| S1 | 1-771-475-11 | SWITCH, SLIDE (REV-STOP-FWD) | | | |
| S2 | 1-572-922-11 | SWITCH, SLIDE (HOLD) | | | |
| S3 | 1-771-053-21 | SWITCH, KEY BOARD (■ / RADIO OFF) | | | |
| S4 | 1-771-053-21 | SWITCH, KEY BOARD (FF PRESET +) | | | |
| S5 | 1-771-053-21 | SWITCH, KEY BOARD (REW PRESET –) | | | |
| S6 | 1-771-053-21 | SWITCH, KEY BOARD (MENU) | | | |
| S7 | 1-771-053-21 | SWITCH, KEY BOARD (SET) | | | |
| S8 | 1-771-053-21 | SWITCH, KEY BOARD (RADIO ON/BAND) | | | |
| S9 | 1-771-053-21 | SWITCH, KEY BOARD (◄► / REPEAT) | | | |
| S10 | 1-771-053-21 | SWITCH, KEY BOARD (ENTER/COUNTER RESET) | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| S11 | 1-572-467-21 | SWITCH, PUSH (1 KEY)(REC) | |
| S501 | 1-692-605-11 | SWITCH, SLIDE (ISS) | |
| | | < TRANSFORMER > | |
| T1 | 1-416-943-11 | COIL (AM OSC) | |
| T2 | 1-416-942-11 | COIL (AM MIX) | |
| T501 | 1-423-744-11 | TRANSFORMER, BIAS OSCILLATION | |
| T801 | 1-423-745-11 | TRANSFORMER, DC-DC CONVERTER | |
| | | < POSITIVE THERMISTOR > | |
| THP601 | 1-810-794-11 | THERMISTOR, POSITIVE | |
| | | < VIBRATOR > | |
| X1 | 1-767-357-11 | FILTER, CERAMIC 10.7MHz | |
| X2 | 1-579-615-11 | VIBRATOR, CRYSTAL 75kHz | |
| ********** | | | |
| | | MISCELLANEOUS | |
| | | ********** | |
| 17 | 1-672-579-11 | ATS FLEXIBLE BOARD | |
| S901 | 1-692-101-11 | SWITCH, LEAF (TAPE DETECT/R TUME) | |
| S902 | 1-692-100-11 | SWITCH, LEAF (ATS/F TUME) | |
| HP901 | 1-500-355-21 | HEAD, MAGNETIC (REC/PB/ERASE) | |
| M601 | 1-763-166-11 | MOTOR (CAPSTAN/REEL)(WITH PULLEY) | |
| PM901 | 1-454-674-31 | SOLENOID, PLUNGER | |
| ********** | | | |
| | | ACCESSORIES & PACKING MATERIALS | |
| | | ********** | |
| ⚠ | 1-528-252-21 | BATTERY CHARGER (BC-7S) (HK) | |
| | 1-528-299-41 | BATTERY, NI-CD (NC-6WM) (AEP,CEV) | |
| | 1-528-299-51 | BATTERY, NI-CD (NC-6WM) (US) | |
| | 1-528-543-11 | BATTERY, NI-CD (NC-6WM) (CH,E,EA,HK,KR) | |
| | 1-528-543-22 | BATTERY, NI-CD (NC-6WM) (JE) | |
| ⚠ | 1-528-580-21 | BATTERY CHARGER (BC-7HT) (JE) | |
| ⚠ | 1-528-644-11 | CHARGER, BATTERY (BC-7DT2) (E) | |
| ⚠ | 1-528-661-11 | BATTERY CHARGER (BC-7DR) (KR) | |
| ⚠ | 1-528-713-21 | BATTERY CHARGER (BC-7DC) (US) | |
| ⚠ | 1-528-744-21 | BATTERY CHARGER (BC-7DY) (AEP,EA,CEV) | |
| ⚠ | 1-528-822-13 | BATTERY CHARGER (BC-7DN) (CH) | |
| | 1-542-116-11 | MICROPHONE | |
| ⚠ | 1-569-007-11 | ADAPTOR, CONVERSION 2P (JE) | |
| ⚠ | 1-569-008-21 | ADAPTOR, CONVERSION 2P (EA) | |
| | 1-759-213-31 | CASE, BATTERY | |
| | 3-008-521-01 | CASE, BATTERY CHARGE | |
| | 3-222-161-11 | MANUAL, INSTRUCTION (ENGLISH,CHINESE)(GX680:US,CH) | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

## MAIN

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | 3-222-161-21 | MANUAL, INSTRUCTION (ENGLISH,RUSIIAN)(AEP,CEV) | |
| | 3-222-161-31 | MANUAL, INSTRUCTION (SPANISH,PORTUGUESE)(US,AEP) | |
| | 3-222-161-41 | MANUAL, INSTRUCTION (GERMAN,ITALIAN)(AEP) | |
| | 3-222-161-51 | MANUAL, INSTRUCTION (FRENCH,DUTCH)(AEP) | |
| | 3-222-161-61 | MANUAL, INSTRUCTION (SWEDISH,FINNISH)(AEP) | |
| | 3-222-162-01 | MANUAL, INSTRUCTION (JAPANESE,ENGLISH,CHINESE,KOREAN)(JE) | |
| | 3-222-162-11 | MANUAL, INSTRUCTION (ENGLISH,ARABIC) (GX688:CH,EA) | |
| | 3-222-162-21 | MANUAL, INSTRUCTION (ENGLISH,CHINESE) (HK,KR) | |
| | 3-222-162-31 | MANUAL, INSTRUCTION (CHINESE,KOREAN) (GX688:CH,KR) | |
| | 3-222-162-41 | MANUAL, INSTRUCTION (ENGLISH,CHINESE) (E) | |
| | 3-222-163-01 | POUCH, CARRYING | |
| | 8-953-304-90 | RECEIVER MDR-E805SP SET(EXCEPT US) | |
| | 8-953-733-91 | EAR RECEIVER MDR-W034SP SET(US) | |
| | A-3052-359-A | REMOTE CONTROL ASSY (GX680) | |
| | A-3052-293-A | REMOTE CONTROL ASSY (GX688) | |

*MEMO*

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2000.11 | New |
| 1.1 | 2001.01 | CEV model addition |
| 1.2 | 2002.01 | Correction of Part No. for IC4 (SPM-01041) |
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| | | |
| | |